INTERNATIONAL GRADUATES AND OPTIONAL PRACTICAL TRAINING:
A PHENOMENOLOGICAL STUDY OF LIVED MOBILITIES

By

Adam Thomas Grimm

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Higher, Adult, and Lifelong Education—Doctor of Philosophy

2021

ABSTRACT

INTERNATIONAL GRADUATES AND OPTIONAL PRACTICAL TRAINING:
A PHENOMENOLOGICAL STUDY OF LIVED MOBILITIES

By

Adam Thomas Grimm

This study uses a phenomenological approach to exploring the lived mobilities of transnational STEM graduates navigating the study-to-work transition in the United States as part of the Optional Practical Training F-1 visa extension. Given that OPT entails a "visa extension," those on the program remain designated as F1 students whose presence in the US is designated as "temporary" and "non-immigrant" for the purpose of "full time" study or "training" (Grimm, 2019; USCIS, 2018). Yet at the same time, these students must complete their degree before they begin OPT. Such a designation places persons on OPT in between study and work, home and host country, as they take the next steps toward their career. Thus, OPT blurs the boundaries between higher education, employers, and the state.

The narratives shared within this dissertation depict how the guidelines and timelines of OPT—as well as OPT's positionality within the broader U.S. immigration regime—shape the temporal, spatial, and relational dimensions of international students' post-graduation mobility experiences. In other words, I examine how the necessities of the study to work transition and of considering one's future in the face of immigration requirements and realities influence how graduates experience their time being in the United States and their relationships during these transitions. I contend these accounts encourage us to think not only how the OPT policy enables international graduates to remain and pursue work in the United States, but also to how the policy constrains these possibilities, challenging graduates to navigate experiences of urgency, ambiguity, unsettledness, and impermanence.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter One: Introduction

Terri is months from completing her master's degree in computer engineering at a university in the United States. With the hope of building a strong foundation for her career and future, she left her family and friends to travel over 6,000 miles from her hometown to pursue academic study in in a foreign culture and land. As Terri prepares for life post-graduation, she must navigate the many stresses of finding meaningful employment, making a living, and navigating personal and professional relationships. She must do so all while simultaneously navigating a series of complex legal bureaucracies around immigration. She is unsure of whether she wants to remain in the United States or return home to her country of origin. When she graduates and her status as a student ends, the F1 student visa that allowed her to enter and remain in the country during her studies will expire. Despite this challenge, she wants to follow her advisor's suggestion of gaining work experience as a programmer with a company in the U.S. Many of her international classmates are considering staying and Terri intends to do likewise.

Fortunately for Terri, The Department of Homeland Security (DHS) outlined an Optional Practical Training (OPT) program that will allow her to live in America and pursue employment after graduation, provided she is able to find a position related to her field of study and starts that position within 60 days. Enrolling in OPT will extend her F1 visa and allow her to maintain her legal status as a "student" in the United States. As Terri is a STEM (Science, Technology, Engineering, and Math) major, she qualifies for a 24-month OPT extension, available only to those with designated STEM degree who can secure jobs with employers who meet the DHS' E-Verify system requirements. Yet, Terri is uncertain of these procedures. She knows this policy exists, but who at the university can explain the complexities of OPT to her and

guide her through the required processes? Will employers know about the policy? Will they be

willing to hire her? Will she be able to do it all in time before her status expires?

What happens at the end of OPT is difficult to determine for Terri, especially if she wants

to stay in the United States more permanently. Perhaps her OPT employer will be willing to

sponsor her for an H1-B skilled temporary non-immigration visa. Obtaining that visa, however,

depends on being one of the lucky 65,000 applicants selected from over 200,000 through a

yearly lottery. As H1-B is also temporary, her future beyond that is still uncertain: Will she find

an employer willing to sponsor her visa? Will she win the lottery? Returning home might also be

problematic, as the social and practical skills she's learned through her studies and employment

might not transfer directly to her home context. Moreover, she has not made up her mind as to

whether she is ready to or wants to return home. At the moment, to stay or go is a decision she

must constantly consider as she weighs her options for the crucial next steps.

This process requires months of preparation that must be coordinated among Terri, her

designated school official, her advisors, and her future employer—a daunting task, especially as

these groups often possess limited understandings of visa related compliance, filing procedures,

and regulations. Despite the frustrations of the OPT process' complexities and ambiguities, Terri

determines to press on.

<p style="text-align:center">***</p>

As an opportunity with an expiration date and an unguaranteed future, OPT

fundamentally creates a space of betweenness for international students graduating from higher

education institutions in the United States —a juncture between study and work, host country

and home country, school and broader society. The above vignette, a fictional narrative

composite informed by participant narratives, introduces these betweennesses encountered in the

lived mobilities of international graduates at this juncture. This is the space "Terri" and over 200,000 similarly situated individuals (IIE, 2020) must occupy upon graduating. Yet, despite its prevalence and high stakes, such an experience remains untheorized and under-investigated (Monahan, 2018). To address this gap in the literature, this dissertation takes a phenomenological approach to examining the experiences associated with the betweenness described above. Although such betweenness is the result of the OPT policy, what follows is not a typical policy study. Instead, it is an exploration of how international students experience the space created by said policy (i.e., the spatial betweenness and its temporal and relational dimensions). Regardless of a policy's intended outcomes, understanding the realities it creates requires direct engagement with those who are subject to it and necessitates inquiry into the meaning it imparts on their lived experiences.

Background: Transnational Mobility and Higher Education

The growth in the number of international students enrolling at U.S. Higher Education Institutions (HEIs) is a well-documented phenomenon. According to the Institute for International Education (2019), students on temporary visas (i.e., international students) reached an all-time high in 2016 at 1.08 million. In this dissertation, I refer to *international students* as those who have traveled to the United States and obtained a visa for the purpose of studying at a U.S. education institution. I use the term *international graduates* for international students who have completed their studies. In response to growing international student enrollments, higher education research has expanded to study questions related to international student choice (Tan, 2015), acculturation (Smith & Khawaja, 2011), experience (Lee & Rice 2007; Lee, 2015), and performance (Poyrazli & Isaiah, 2018) at U.S. HEIs. However, what happens when international students graduate remains notably under-researched. Suter and Jandl (2006) have estimated that

3

15% to 35% of students studying outside their home country can be expected to work and settle in their host countries upon finishing their studies. If this estimate is correct, 160 to 180 *thousand* students in the United States are currently considering staying beyond their studies (IIE, 2019). Patterns for staying differ by degree level and by program of study. The number of students in science, technology, engineering, and math (STEM) programs who intend to stay in the U.S. after graduation is particularly noteworthy, as 48% of international graduates in a recent NSF *Students in Science Survey* indicated intentions to stay (Han & Appelbaum, 2016).

However, navigating the post-graduation space for international graduates is markedly precarious and complex. Graduates must consider a variety of economic, political, social, familial, and personal factors when making decisions regarding entering a new career and determining what one wants to do next. Decisions to stay or go after completing academic study are arguably more complicated than the initial decision to study abroad because, in the United States, there are no direct pathways to "staying" for international graduates (Robertson, 2013). A degree from a U.S. institution does not guarantee employment opportunities or legal status. This can be contrasted to Canada and Australia, for example, where points-based systems essentially create a legal pathway through higher education to permanent residence (PR) (Findlay, 2010). In these systems, international students can accumulate points toward obtaining PR by advancing through higher levels of education and pursuing certain degree programs (Robertson, 2013). In the United States, however, students are faced with an unclear and complicated set of options ranging from programs for research scholars (J1), highly skilled migrants (H1-B), or practical training (OPT), all of which vary in their requirements for application, acceptance rate, and stipulations regarding what individuals may and may not do.

Upon attaining their degrees, the most direct choice for international students is the Optional Practical Training Program, an F1 (student) visa extension that allows graduates to work in a field directly related to their majors for a period of either 12 months (for non-STEM) majors to 36 months (for STEM majors). The basic requirements are that a student: (1) obtain a degree from a U.S. HEI and (2) obtain formal employment or internships related to their field of study. To obtain the extension, students must submit materials through their designated school officer (DSO), the institutional agent responsible for reporting student information to the Student and Exchange Visitor Information System (SEVIS) and for overseeing the graduate's activity during their time with the OPT extension. Compared to similar visa programs for skilled internationals in the United States (e.g., H1-B, which is capped at 65,000 yearly and determined by lottery), international students are more likely to enroll in OPT (Ruiz & Budiman, 2018). As OPT entails a "visa extension," those in the program are designated as F1 "students" whose presence in the U.S. is termed "temporary" and "non-immigrant" for the purpose of "full time" study or training (Grimm, 2019; USCIS, 2018). This designation places persons on OPT in between study and work as well as home and host country as they take the next steps toward their career, thereby blurring the boundaries between higher education, employers, and the state.

Among F1 student visas, the OPT category is the fastest growing designation (compared to f-1 enrollees in undergraduate and graduate programs), jumping from around 40,000 students in 2006 to over 200,000 in 2018, a fivefold increase in under a decade (IIE, 2019). Moreover, during this period, overall international student enrollment increased by roughly 45%, suggesting the growth in OPT enrollment was not precipitated by increased enrollment in other categories. In 2008, the Bush administration added provisions to allow students in STEM majors to stay 17 months in addition to the 12 months allocated to all OPT recipients. During Obama's tenure as

president in 2016, the DHS further extended the allowed stay for STEM graduates to 36 months total. Since the initial 2008 extension, STEM OPT—particularly for those with master's degrees—made up the majority of new OPT enrollees. Ruiz and Budiman (2018) calculated that over one third of *all* OPT enrollees were STEM master's students.

Focus and research question. Given the growth of the OPT program—particularly among STEM majors—my inquiry focused on the experiences of students who obtain degrees in STEM fields and extend their status to take part in OPT. Although any OPT experience is a valid and worthwhile focus for scholarship, I chose to focus on STEM because it is these persons who have contributed the most to the recent growth in OPT program enrollment (Ruiz & Budiman, 2018). Moreover, focusing on those in designated STEM programs allows me to consider the experiences of those eligible for up to 36 months total of OPT and therefore have the ability to remain in the United States and work for longer periods than their peers whose degrees are outside of the STEM fields. With this, I was able to examine not only experiences beyond immediate study-to-work transitions but also into how OPT functions as a bridge to their next steps.

In the context of the current study, I interpret the OPT as a space that situates international graduates in a position of betweenness. Due to their transnational status (i.e., crossing borders to pursue education), they are "between" nation-state contexts and home and host countries. Furthermore, because they are transitioning from formal schooling to the workplace, they are also "between" college and career. Finally, because OPT is explicitly temporary, this in-between space is characterized by a timetable and an expiration date. This dissertation goes beyond identifying the legal provisions that provide and constrain opportunities for students to center the stories and lived experiences of international graduates who are

currently inhabiting the in-between space of OPT and examines their articulations in terms of how policy contours this space of betweenness and transition. Like Terri's story at the beginning of this chapter, I worked with participant storytellers to understand how they make meaning of the ways OPT shapes their academic, social, and professional lives.

The overarching research question that guides my inquiry is:

How do international STEM graduates experience the in-between space and time associated with the Optional Practical Training Program?

Methodology and Methods

In this dissertation, I utilized a methodology of *hermeneutic phenomenology* combined with a narrative inquiry method. This approach allows me to grapple with capturing, analyzing, and presenting knowledge about lived experience in the form of narrative. Phenomenology is the "study of experience, particularly as it is lived and as it is structured through consciousness" (Henriksson & Friesen, 2015, p. 1) and hermeneutics is the practice of interpreting meaning. Hermeneutic phenomenology, then, reflects the epistemological and methodological approach I utilized when approaching my project: endeavoring to understand the experience of OPT in-betweenness as it is articulated by those taking part in the program. To examine these experiences, I employed *narrative inquiry* through the medium of storytelling (Clandinin & Connelly, 2004; Kim, 2016). Specifically, I conducted conversational interviews that were loosely organized and semi-structured interviews, asking participants to tell stories related to their experiences. Narrative inquiry provided a window into the emphases individuals imparted through the stories they chose to tell, as well as an opportunity to probe underlying values and motivations. Extensive interviews were conducted with nine participants: three bachelors, three master's, and three PhD graduates (presenting here an in-depth exploration of five narratives). In

accordance with my methodological approach, participants took the lead in determining how and what to share in stories of their transitions and how the OPT and other relevant immigration policy guidelines and timelines have contoured their experiences and future plans. To engage the stories and experiences shared with me, I enacted a process of writing and re-writing findings chapters to develop a phenomenological rendering of participants' *lived mobilities of betweenness* that could convey to readers the experience of transitioning from study to work in a transnational setting and in a space where opportunities and experiences are significantly shaped by the visa policies that enable and constrain graduates' choices and relationships, the schools that enroll them, the employers they hope will hire them, and the state (which determines their legal viability).

Significance

This dissertation study seeks to understand the lived experiences of international STEM graduates as they navigate OPT, an increasingly common but under-examined position for a growing number of international graduates (Ruiz & Budiman, 2018; Monahan, 2018). As dictated by policy, OPT is explicitly temporary. It is therefore my intention to explore OPT in terms of its temporal and spatial betweenness. I take a humanist approach to understand the experiences of others—to get to know them, to learn from them, to hear their stories. That said, exploring the experiences of international STEM graduates may make it possible to speak to other interests and topics relating to transnational student mobility beyond graduation, ranging from current and future international students to comparative education scholars and policymakers.

For Current and Future International Students. A key driver of this dissertation is the hearing and sharing of stories by international graduates taking part in OPT. As such, it is my

sincere hope that international students, both present and future, might benefit from this research. This study was designed to be an opportunity for participants to recall their experiences so as to think through their own stories and aspirations, a process that participants acknowledged was affirming and helped to clarify for them their own stories. For those currently enrolled in OPT or considering applying, the stories shared and analyzed in this dissertation can serve as a resource for navigating the OPT experience. I believe these stories might enable future students to make better informed decisions regarding OPT and prepare for aspects of the experience they may not have anticipated. I also intend for the experiences featured in this dissertation to indirectly inform and inspire university personnel working with international students to act more deliberately with the suggestions outlined in the concluding chapters.

   For Higher Education Institutions. The simplest justification for why HEIs should care about the question driving this study is that students on OPT remain on F1 visas under the charge of the institution from which they graduated. The Department of Homeland Security (DHS) requires that SEVIS reporting continue for those on OPT, even though they have graduated and may not even be living near the university (Han & Appelbaum, 2016). Apart from this legal obligation, it is also important to recognize the moral responsibilities of HEIs in the spirit of ensuring the personal and professional wellbeing of those attending their institutions. Even if they are not U.S. citizens, one would hope such institutions are concerned with understanding how students experience their transitions to the workforce/society upon graduation, as it is certainly these institutions' responsibility to ensure students are well prepared for such transitions. HEIs, therefore should be able to use the findings of this study to design and implement better resources and programming to guide current and future international students through this period.

For Higher Education/Comparative Education Literature. When it comes to studying international students in the United States, the field of higher education seems to be chiefly concerned with students' transitions to and experiences with(in) higher education (Lee, 2012). Comparatively fewer empirical studies and theoretical models have sought to understand what happens after graduation. As a result, studies examining the international students' experiences transitioning from college to the workforce are relatively scant (Lee, 2012).

The handful of studies that have considered international students in this context have mostly focused on examining students' motivations to go or stay (Han & Appelbaum, 2016). These studies often use the same "push-pull" framework employed in conceptualizing study abroad decisions and motivations (Mazzarol & Soutar, 2002). Notably, this approach reduces the complexities of these decisions and motivations to a neoliberal market-oriented consideration of what economic opportunities are available in home and host countries and assumes a rational actor chooses based on utility maximization calculations. Other scholars, however, have endeavored to consider how non-economic factors shape the post-graduate experience (see Lee & Kim, 2010; Lee, 2012). I follow their lead in considering a variety of factors beyond those typically discussed. Moreover, taking a phenomenological approach to representing these experiences enables readers to get a sense of *what it's like* to navigate such transitions.

For Policy Makers, Labor Economists, and Scholars of Migration. Outside of HEIs and the field of higher education, there are a number of stakeholders that stand to gain from the findings and frameworks in this dissertation. As my study is structured to understand post-graduate experiences within the context of the OPT STEM F1 visa extension, these experiences indicate clear and direct implications for policy. The most obvious might be whether or not the policy is doing what it was intended to do. As OPT was created to provide a "practical training"

supplement to formal in-class education by allowing international graduates to participate in the workforce, participants' stories in this study provide important perspective on the policy's results.

The importance of STEM-trained individuals to the U.S. workforce is also an issue of concern for both policymakers and economic observers. Even though individuals on STEM OPT are officially engaged in "practical training" as a supplement to in-class education, they are also actively engaged in the labor pool, contributing both their skills and knowledge to in-demand fields (Han & Appelbaum, 2016). My dissertation is unique in that it provides a rare look beyond large-scale data of "who is working where and for how long" (data already collected and analyzed by policy makers and economists), to investigate the experiences of the individuals in these positions. My purpose in doing so is to humanize policy debates regarding international graduates by sharing how the OPT policy is experienced by those whose mobility it mediates.

Finally, it is important to touch on migration patterns and issues of immigration. As governments and scholars continue to be concerned with the identification of flows of highly skilled migrants, the OPT program must be considered in both the context of immigration and the context of education. As OPT allows international graduates to stay in the U.S. beyond their studies, migration scholars and policy makers alike should prioritize understanding how the OPT policy enables and constrains the movement of these types of migrants (young, skilled, mobile).

Organization of the Dissertation

Following this introduction, the dissertation proceeds with a review of the literature in Chapter Two and situates this study within ongoing theoretical and empirical discussions in higher education and beyond. Chapter Three is comprised of an outline of my approach to conducting interviews, analyzing participant narratives, and drafting and framing findings, all

while considering the epistemological and methodological underpinnings of this study. Chapter Four explores the initial study-to-work transition, centering the stories of five graduates: David, Xiaoyi, Dhara, Emma, and Ida. In particular, I examine how finding and beginning work under OPT is associated with a sense of *urgency* to make the transition in accordance with visa timelines and guidelines to avoid falling out of status and deportation. This sense of urgency is accompanied by layers of *ambiguity* wherein graduates attempt to develop strategies, identify resources, and seek guidance in environments where advisors and other support services meant to guide students through their transition—as well as employers—may have not even heard of OPT. Chapter Five continues the narratives of the five graduates, exploring how the temporary nature of OPT and its situation within a broader immigration regime deplete formal pathways between visa status and cause graduates to experience *impermanence* and *unsettledness* as they consider what comes next and whether they will stay or go. In Chapter Six, I utilize the traversing systems framework (Garton, Grimm, and Kim, 2021) to situate the findings in relevant conversations regarding international student mobility and experiences, taking note of how OPT contours the temporal and spatial dimensions of graduates' experiences and choices, and how these experiences advance our theoretical understandings of this population. In Chapter Seven, I conclude by reflecting on the project as a whole and look ahead to future possibilities.

Chapter Two: Literature Review

In this chapter, I introduce the concepts and previous research that informed my study and gives readers an understanding of how the in-between spaces of OPT are construed. I begin with an overview of the literature on the internationalization of higher education to establish how international students have typically been studied and discussed. Within this context, the OPT policy can be better understood in terms of policy regulations, trends associated with policy, and discourse in support of and opposition to the program. This overview establishes the study's parameters and the bounds of the target population as transnationally mobile STEM graduates in the transition from study to work.

Given this delineation, I show how the present study is informed by literature on complex and contemporary forms of migration, wherein students are viewed as more than temporary sojourners (Robertson, 2013). A brief overview of STEM graduate education, particularly as it pertains to international students, subsequently provides context for the experiences directly preceding OPT enrollment. I conclude by demonstrating how previous work examining the transition from study to employment further informed this study.

The Internationalization of Higher education

Throughout the higher education literature, scholars have often discussed international students within the context/phenomenon of the *internationalization of higher education*. However, interpretations and definitions of internationalization are varied, shifting, and contested (Knight, 2015). In general, the internationalization of higher education is often conceptualized as higher education's *reaction to* globalization (Altbach, 2015; Altbach & Knight, 2007). Recently, Knight (2015) has claimed, "Internationalization at the national, sector, and institutional levels is defined as the process of integrating an international, intercultural, or

global dimension into the purpose, functions or delivery of postsecondary education" (p. 2). In this way, internationalization can be understood as the intentional actions of *local* actors to incorporate *global* elements into education.

Meanwhile, other scholars (Cantwell & Maldonado-Maldonado, 2009; Marginson & Rhoades, 2002) have contested that there is more of an interplay between the local and the global. For example, the "glonacal" approach propagated by Marginson and Rhoades (2002) has been used to argue how motivations and actions at global (glo), national (na), and local (cal) levels interact and influence each other. From this perspective, globalization is realized through the interdependent and combined agency of players at multiple levels and should be understood as more than the local reacting to the global. Indeed, the glonacal approach has been useful in identifying the varying motivations and realities of the internationalization of higher education. Cantwell and Maldonado-Maldonado (2009) have argued that only when the global and local are thought of as mutually construed can scholars begin thinking about the construction and reconstruction of the social world. For those involved in the processes and activities commonly recognized in internationalization ventures, this view of internationalization allows for considerations of agency beyond "reaction" (Altbach, 2015). It is this particular treatment of internationalization, wherein the global and local are understood as mutually re-enforcing, that guides my understanding of the phenomenon, particularly as individuals consider mobility decisions.

Internationalization Activities. Internationalization is actualized through a number of activities, including supporting international-themed programs, recruiting international students, establishing branch campuses abroad, collaborating with individual and institutional partners in other countries, and sending students to study abroad (Altbach, 2015). Although each of these

endeavors is an important element of internationalization, the primary focus of this study is how transnationally mobile individuals are implicated in discussions concerning the internationalization of higher education.

Motivations to "internationalize" are multifaceted (Altbach, 2007). The literature on higher education internationalization, however, has often been preoccupied with discussing internationalization from the perspective of higher education institutions (HEIs). HEIs might engage in international student recruitment and enrollment for profit (Altbach & Knight, 2007) to fill budget holes created by cuts to state allocations (Cantwell, 2015) or to provide students with exposure to diverse global perspectives (Beelen & Jones, 2015). The financial motive is enabled by the abundant capacities of host institutions and systems (supply) and is compounded by the unmet demand for higher education in sending countries (Findlay, 2010). Although this economic basis underlies many internationalization efforts, HEIs have been quick to promote the educational and social benefits of interacting with international students, such that internationalization is now "firmly embedded in institutional mission statements, policies, and strategies" (Knight, 2011, p. 2). Of this reality, studies have argued that "internationalization at home" efforts, part of which includes recruiting international students, are associated with the attainment of various intercultural and international competencies and skills (Beelen & Jones, 2015; Crowther, et al., 2001). Extending this argument, Soria and Troisi (2015) have asserted internationalization at home to be a viable "alternative to study abroad" when it comes to the attainment of such skills (p. 261).

International students in the United States. HEIs' internationalization efforts would be in vain, however, were it not for students' willingness and desire to pursue higher education across borders (Findlay, 2010). In other words, as Knight (2015) has suggested,

internationalization is more than the combined efforts of HEIs to incorporate global elements.

Instead, it is comprised of complicated processes that require the understanding of

transnationally mobile individuals' experiences and agencies. In seeking such an understanding,

scholars have theorized and empirically scrutinized students' motivations for studying abroad.

Discussions on international student college choice have often relied on the push-pull framework

of college choice (Altbach, 1998; Eder et al., 2010; Li & Bray, 2007; Mazzarol & Soutar, 2002;

McMahon, 1992; Shanka et al., 2006). In this framework, unfavorable conditions in a student's

home country may *push* them abroad while scholarships and opportunities (including the

opportunity for future employment) in other nations *pull* students inward (Altbach, 1998, p. 240).

Models utilizing the push-pull framework have offered sets of factors that may contribute to a

student's decision to study abroad in a certain country or institution. These approaches include

analyses from economic, social, and personal perspectives, the most convincing of which seek to

grapple with multiple dimensions, while cautioning the dangers inherent in attempting to

generalize across all instances (Lee, 2008). These same factors and perspectives shape the post-

graduation "stay or go" decision process, a topic that will be discussed at length in chapter six.

     Indeed, the presence of international students on a given campus is an embodiment of

transnational endeavors. Although rarely defined explicitly in research on this population,

international students are most commonly understood as those who cross borders to pursue

education and are often denoted by their visa status (OECD, 2013). In the United States, the most

common visa is the F-1 Student visa, explicitly designed for foreign students intending to study

in the United States (US Department of State, 2019). Separate from the F-1, international

students might also be designated as M1 (vocational training) or J1 (study or work-based

exchange), although these designations are less common. These visa categories distinguish

international students from their domestic peers and provide legal parameters for the behaviors and activities a student is and is not permitted to engage under the F-1 visa category (USCIS, 2018; Day & Grimm, 2021).

In the United States, international student enrollment has nearly doubled in recent decades from 547,867 in 2000/01 to over 1,094,792 in 2017/18 (IIE, 2018). In tandem with this rise in enrollment, higher education scholarship has increasingly focused on international student populations. Within this growing body of literature, scholars have probed topics related international student college choice (Tan, 2015), acculturation (Smith & Khawaja, 2011), experience (Lee & Rice 2007; Lee, 2015), and performance (Poyrazli & Isaiah, 2018) at US HEIs. When it comes to studying international students, the field appears to be chiefly concerned with students' transitions to and experiences with(in) higher education. The underlying assumption of this approach is that international students are *temporary sojourners* (Ward & Geeraerdt, 2016) who are in the United States momentarily and for the primary purpose of academic study (Grimm, 2019).

International Student Graduates. Commonly absent from research on international students are their post-graduation experiences. Sutter and Jandl (2006) have estimated that, globally, up to one third of all students studying abroad can be expected to stay in the country where they received their education. In the United States, the number of students in science, technology, engineering, and math (STEM) programs who intend to remain is particularly noteworthy. According to a survey analyzed by Han and Appelbaum (2016), 48% of international graduate STEM students intended to stay beyond graduation to pursue employment. Advancing to higher levels of study is also correlated with higher stay rates. For instance, Finn and Pennington (2018) used NSF data sets to conclude that, among international students who

graduated with PhDs from U.S. HEIs, 70% remained in the U.S. after five years and 64% remained after 10 years.

For international graduates from institutions in the United States, there are no direct pathways to staying or pursuing permanent residence (Grimm, 2019). A credential from a U.S. institution does not by design guarantee opportunities for employment or legal status. Instead, many graduates pursue Optional Practical Training (OPT) to remain and work in the United States. OPT is an F1 (student) visa extension that allows individuals to work in a field directly related to their majors for a period of either 12 months (for non-STEM majors) or an extended period of another two years for up to 36 months total (for STEM majors) (USCIS, 2018). Among individuals with F1 student visas, OPT is the fastest growing sub0category (compared f-1 students enrolled in undergraduate and graduate programs) jumping from around 40,000 students in 2006 to nearly 203,000 in 2017, a fivefold increase in a decade's time (IIE, 2018).

STEM Education

As previously mentioned, the growth of the OPT program is driven in large part by students graduating with master's degrees in STEM fields who are subsequently taking part in STEM OPT (Ruiz & Budiman, 2018). The acronym "STEM" (science, technology, engineering, and math) was developed by people at the National Science Foundation (NSF) active in promoting educational reform in support of the sciences (Sanders, 2009). The STEM classification is now used to place policy, programmatic, and pedagogical emphasis on these disciplines deemed essential for the continued success of the U.S. economy (Langdon et al., 2011). In recent years in higher education, the enrollment of international students in STEM has been a topic of interest and even an issue of concern for those worried about the viability of the U.S. workforce in training and retaining sufficient talent (Herman, 2018). In the NSF's most

recently reported data, 35% of all graduate students (master's and PhD) enrolled in science or engineering fields were international (NSF, 2018). In many STEM programs, particularly at the graduate level, international students indeed outnumber their domestic peers. For example, Anderson (2017) has noted that international students made up 79% of computer science and 81% of electrical engineering graduate students at U.S. HEIs in 2015.

  International STEM students. As the number of international students in STEM graduate programs has increased, higher education researchers have begun exploring these students' transitions and experiences in their programs. Within the literature and in practice, "graduate education" includes both master's level and doctoral education, with many studies especially focusing on the later. Due to the lack of research exclusively focused on international students in master's programs, I review the literature on STEM education more broadly and note when observations or experiences might be uniquely attributed to PhD rather than master's experiences. Most of these studies have utilized qualitative approaches to understand international students' experiences in depth (Herzog, 2012; Le & Gardner, 2010; Zhang, 2016). Only one has utilized a survey approach to compare international students' experiences more broadly with students of other demographic categories (Bluestein et al., 2018)

  These studies found that, in addition to the acculturative challenges associated with moving to and living in new academic and cultural spaces (e.g., culture shock, second language adjustment), the STEM graduate experience notably encapsulated a variety of unique challenges and affordances. Moreover, several studies found that many international STEM graduate students reported feeling academically prepared (Zhang, 2016) even as they struggled with the non-academic elements of their experience, such as interaction with peers, making new friends,

and negotiating relationships with faculty advisors (Herzog, 2012; Le & Gardner, 2010; Zhang, 2016).

These experiences, however, have not been uniformly reported across all studies. For instance, compared to their domestic peers, Bluestein et al. (2018) found the majority of the over 200 international students in their study reported satisfaction with their classroom experiences. This finding might have been informed by participants' previous experience with lecturing in their home countries or in cultures where educators are socially revered. Similarly, the authors found that international STEM graduate students reported having closer relationships with their advisors than their non-international peers. In a study examining international students' experiences as graduate assistants, Herzog (2012) found graduate students in STEM fields faced unique challenges compared to their peers in non-STEM majors. For example, participants reported feeling distant from both their peers and their advisors and experienced difficulty forming meaningful personal and working relationships with them. Furthermore, some STEM graduate assistants noted they worked extra hours on top of their assistantships, as they did not feel comfortable discussing the issue with their advisors. Despite these challenges, Le & Gardner (2010) found the students in their study remained optimistic and motivated to persevere. This dissertation discusses many of these challenges in-depth, indicating that they continue to be prevalent for those taking part in OPT.

Discussions of migration and mobility, brain drain, and brain mobility

Researchers, especially those outside U.S. higher education literature, have long sought to conceptualize the influx of globally mobile talent. In this regard, some scholars (Li, 2012; Robertson, 2006) have discussed international students within the context of *brain drain* and other types of *brain movement*, while others (King & Raghuram, 2012) have integrated concepts

from migration studies to understand international students as the embodiment of new forms of transnational mobility.

"Brain" Movement. Comparatively few studies in the field of higher education and beyond have taken up the study of what happens to international students when they graduate (see Lee & Kim, 2009; Li, 2012). Only a handful have examined visa programs targeted at graduates from domestic institutions (Gribble, 2008; Grimm, 2019; Robertson, 2013; Robertson & Runganaik, 2014; She & Wotherspoon, 2013; Tremblay, 2005; Zigarus & Gribble, 2014). Although these policies are specifically designed for students and have been shown to influence international students' decisions and opportunities of (Cantwell, 2011; Jacobs, 2020), higher education literature has yet to comprehensively engage these programs (Tremblay, 2005 and Jacobs, 2020 are notable exceptions).

The concept of brain drain was originally used by the British Royal Society to describe the departure of scientific talent from Europe following the Second World War (Balmer et al., 2009). In the context of international students, brain drain describes the loss of talent that occurs when students decide to stay in their host countries upon completing their studies (Baruch, et al., 2007; Jacobs, 2020). Brain drain in one locality results in *brain gain* elsewhere, a term used to conceptualize how some localities enjoy the self-perpetuating benefits of attracting and retaining human capital (Stark et al., 1997). As concepts, both brain drain and brain gain imply the movement of talent movement is unidirectional. Recent approaches, however, have complicated this idea with multi-directional interpretations through the concepts of: (1) "brain return," or "reversing the brain drain," which describes instances in which talented individuals train abroad and return to their home countries afterward (Mayr & Peri, 2009; Zweig, 2006); (2) "brain circulation," where "highly skilled personnel" remain in host countries for a short time and then

move to follow transnational job opportunities (Cao, 1996, p. 269); and (3) "brain exchange,"

where human capital flows move among and across destinations, resulting in no net loss or gain

(Pellegrino, 2001). Among these observations of global talent mobility, Ben Wildavsky (2012)

has viewed the above patterns as part of what he calls *The Great Brain Race*. In the context of

higher education, brain drain directly implicates the question of whether or not international

students will—and be able to—remain in their host countries beyond graduation. Such decisions

are not made by only considering economic conditions in isolation (Robertson, 2013). To be able

to stay, immigration policy infrastructure must be in place to provide students with options for

post-graduation legal status. In the context of this dissertation study, I show that it is these very

policies that both enable and constrain the experiences of students taking part in the OPT

program.

 International student mobility. In the first comparative analysis of immigration

schemes and their direct connection to higher education, Tremblay (2005) argued that "student

migrations can be a precursor to subsequent migrations of qualified workers" (p. 205). In

comparing similar policies promoted in the United States, Australia, Canada, New Zealand,

France, Germany, and the United Kingdom, she concluded these policies have "resulted in the

development of a new migration channel whereby individuals enter a country to study and are

subsequently recruited to work there temporarily or permanently" (p. 221). In other words,

international students can be thought of as *would-be migrants* and their status in their host

countries should be considered beyond that of a temporary transnational sojourn for study only.

 Taking a political economic perspective to students as possible future migrants, other

scholars have compared student entry and immigration policies to examine how they impact

international students' trajectories in the United States, Canada, and the United Kingdom (She &

Wotherspoon, 2013). The authors specifically addressed programs designed to enable international students to stay beyond graduation and obtain temporary employment in their host countries. They posited that the Post Study Work (PSW) categories in the UK, the Optional Practical Training program in the United States, and the Post-Graduate Work Permit Program in Canada all "set probationary periods to test international students' adaptation to the local labor market and to make sure that only those highly skilled who have succeeded in being integrated into the receiving society are able to eventually fulfil their intention to stay" (p. 4).

According to this perspective, these programs can be thought of as both a *bridging* and a *filtering* mechanism for international students transitioning into their host counties' labor markets and as tools for states to retain economically and socially suitable talent (Grimm, 2019). Taking a more critical perspective, Hawthorn (2010, 2013) has viewed such programs and their filtering capacity as part of a "two-step" migration scheme whereby countries bring international students (step one) in and create "designer immigrants" who can meet the host country's social, cultural, and economic expectations upon transitioning to more permanent forms of work and residency status (step two).

Global mobility and transnationalism. Within the field of migration studies, scholars have identified student mobility as part of broader trends and new patterns of migration. Migration has typically been identified via traditional settler nations as both unidirectional and permanent (King & Raghuram, 2012; Robertson, 2013). For instance, countries like the U.S., Canada, and Australia grew and developed when migrants moved to these settler nations from their home countries in various waves of immigration. More recently, migration scholars have identified new patterns of transitional migration characterized by varying degrees of temporality and impermanence as well as by circulation between home and host countries (Robertson, 2013).

The concept of *transnationalism* has arisen as a popular framework for understanding migration today (King & Raghuram, 2012). In this conceptualization, complex forms of mobility and temporality erode the notions of borders and permanence. Originally intended as a post-Cold War critique and rethinking of global mobility with an optimistic view of an increasingly borderless world (Basch et al., 1994), the concept has more recently been applied to understanding the lived experience of those who cross borders for academic study (King & Raghuram, 2012; Robertson, 2013). According to Basch et al., (1994), transnationalism is the processes by which persons "forge and sustain multi-stranded social relations that link together their societies of origin and settlement" (p. 7). Subsequently, Vertovec (1999) classified the ways transnationalism can be operationalized as: (1) social morphology, (2) a type of consciousness, (3) a mode of cultural reproduction, (4) an avenue of capital, (5) a site of political engagement, and/or (6) a (re)construction of place or locality. For Vertovec (1999), transnationalism retains its meaning of crossing borders or existing in a space beyond borders throughout all of these categories. He cautioned, however, for researchers to be deliberate in their use of the term when interrogating transnational experiences. Following this characterization, a growing number of scholars have advocated for the inclusion of international students as an important category of transnational migrants (Findlay, 2010; Robertson, 2013; Waters & Brooks, 2012).

For the purposes of my study, the first two of Vertovec's (1999) classifications of transnationalism are applicable to engaging the experiences of international graduates. First, *transnationalism as social morphology* is described as the experience of spanning across borders. Within the literature on transnationalism, ethnic diaspora are the quintessential example whereby individuals are networked across one or more nation states. As travelers between nation states, international students certainly fall into this category. Second, *transnationalism as a type of*

consciousness refers to the notion of self-awareness and a sense of belonging to or identifying with more than one nation state (Vertovee, 1999). Transnational consciousness has been conceptualized as often involving "depictions of individuals' awareness of decentered attachments, of being simultaneously 'home and away from home,' 'here and there'," (p. 450). In the discussion section of this dissertation, I grapple with notions of how engaging OPT and other immigration policies contour international graduates' transnational experiences and how this contouring influences and inhibits their feelings of and aspirations toward belonging in the development or rejection of a transnational consciousness or identity.

Specifically, I argue in this study that higher education is a catalyst and channel for transnational mobility. Similar to my inquiry, Robertson (2013) has viewed visa policies like OPT as part of the "education-migration nexus," wherein international students embody a new kind of contemporary transnational migration trend. Robertson's work (in Australia) examines how individual student-migrants are implicated in policies and systems and caught up in the "political pendulum" of education and migration debates that swing in multiple directions as they respond to "market, labor, and public opinion trends" (2013, p. 15). As a result, student-migrants follow a "kind of long-term migration trajectory" that is "embedded in a complex web of regulatory systems that simultaneously enabled and constrained their ability to enter the state temporarily as students and then to accumulate the capital required to become skilled migrants" (pp. 2-3). As the above indicates, Robertson identified the marketization of education and migration as the primary backdrop to the rise of the student-migrant, highlighting a global policy trend that directly connects international education to skilled migration.

Transitioning from Study to Work

        As previously mentioned, the post-completion option of OPT stipulates that participants must obtain and maintain employment related to their field of study to remain in compliance with USCIS guidelines (USCIS, 2018). As such, the program situates enrollees at the intersection of school and the workplace as they transition from student to what comes next. Though it is widely assumed that one of the primary purposes of higher education is to prepare students for success and life post-graduation (at least from the human capital perspective), research into the transition from study to work and how such a transition is experienced by international students is relatively scant. This section briefly reviews three areas of study related to the transition from study to work (Emerging Adulthood, Employability, and Career Development) and explores how they pervade international student experiences.

        Emerging Adulthood. While not explicitly focused on college students, scholars in psychology have theorized a developmental stage entitled *emerging adulthood* (Arnett, 2000) to encapsulate the period of transition from adolescence to adulthood, a time typically associated with traditional college enrollment (Murphy et al., 2011). According to Arnett (2000), emerging adulthood is characterized by identity exploration, instability, a focus on self-determination with an optimistic eye toward the future, and a feeling of in-betweenness.

        In focusing exclusively on interrogating emerging adulthood in the transition from "college to career" (p. 174), Murphy et al. (2010) found that many of the typical features of emerging adulthood were reported as part of this transition. Most notably, shifting from college to work was associated with both uncertainty and optimism, with students reporting the "ability to adapt to an unsatisfactory work environment and maintain an optimistic outlook for more satisfying future work" (p. 180). Of further note is that this transition was aided by strong social supports in family and friends, as well as realistic expectations for the future; both of which were

associated with higher life satisfaction. However, the narratives and discussion in the following pages demonstrate that because of the way policies contour the transition, international graduates may lack such supports or capacity to develop future expectations.

The theory of emerging adulthood has been challenged for its culturally constructed assumptions, as individuals in countries outside the Global North or from those with differing racial, ethnic, and class groups may not experience this period to the same degree or duration (Syed, 2015; Syed & Mitchell, 2013). For example, in exploring the influence of culture in emerging adulthood, Nelson et al. (2004) found Chinese college students: "(1) feel they have reached adult status in their early twenties, (2) have culturally specific criteria for adult status, and (3) tend to engage in behaviours and have beliefs and values that appear to differ from emerging adults in Western cultures" (p. 26). Nevertheless, the ongoing work in psychology to theorize and empirically examine emerging adulthood resonates in the experiences of international graduates taking part in in the OPT, particularly as the element of betweenness is a hallmark of emerging adulthood.

Employability. Another body of literature that touches on the transition from study to work is employability. Yorke (2007) has defined employability as the set of "achievements, such as skills and personal attributes, which increases graduates' opportunities to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy" (p. 8). Employability, then, can be thought of as a collection of traits assessed both by the prospective employer and employee. A number of higher education researchers have sought to understand employability in the transition from schooling to work through one of two approaches: (1) surveying current students about their perspectives and preparation for future work (Li, 2012; Ng & Burke, 2006) and (2) asking recent graduates to

reflect on the transition experience (Li, 2012; Stiwne & Jungert, 2010). Both approaches have revealed that students (even graduate students) often do not have a clear idea of what employment after graduation will entail or have a definite plan for their futures when enrolling. Similarly, in their study examining masters' engineering graduates, Stiwne and Jungert (2010) found recent graduates reflected that their plans and preparation for their futures were determined by both their studies and initial workplace experiences.

The question of employability is decidedly more complex for international graduates who often consider the options and opportunities available in both their home and host countries (Findlay, 2010). In exploring how Chinese graduate students in the UK thought about employability on a global stage, Li (2012) presented a number of findings that provide insight to the current study. In a longitudinal study spanning one year, Li (2012) followed 23 Chinese graduate students six months before and after graduation to understand how their perceptions of their own employability were shaped and changed by the transition from study to work. Participants reported being uncertain but optimistic that an overseas education would increase employability, even as they articulated that the perceived value of a UK degree was declining in China. Alongside this recognition, participants also expressed that the overseas *experience* (rather than the degree) were important in giving them the soft skills necessary to enhance their employability in China. Notably, Li (2012) found Chinese postgraduates did not necessarily view their UK education/degree as a ticket into the global labor market, with nearly all of the 23 participants articulating desires to return to China. For approximately half of the participants, however, remaining in the UK to gain relevant work experience for a few years before returning to China was seen as beneficial for enhancing employability. In attempting to secure work, some participants were deterred by the competitive labor market and restrictive immigration policies.

Career counseling and career development. The experience of transitioning from study to work also touches on issues discussed in existing research on career development. Although the body of literature on career development is broadly atheoretical and highly applied (McMahon, 2017), some scholars have empirically investigated international students' trajectories and the challenges they face in career development (Liu, 2009, Monahan, 2018; Shen & Herr, 2004). Although U.S. HEIs commonly offer career counseling and career development services, transnational career prospects and complex immigration regulations for international students pose complicated challenges for HEI service providers (Balin et al., 2016). As a result, international students may face more complicated challenges than their domestic peers as they prepare to graduate and obtain work (Monahan, 2018). Most of the studies examining career development for international students have been concerned with post-graduation "stay or go" decisions. These studies have conducted analyses by surveying or interviewing international students currently enrolled at U.S. HEIs about their intentions post-graduation. Gesing and Glass (2019) found that 49% of graduate students in STEM fields indicated intentions to begin their careers in the U.S., while 11% intended to leave and 40% noted they were uncertain as to whether they wanted to remain. These authors also found the stay or go decision was influenced by perceptions of job opportunities and socio-political factors. For instance, employment options in the United States encouraged those who intended to stay to do so, whereas socio-political factors such as (perceived) discrimination pushed some students to desire a return to their home countries. Findings of employment being the most significant consideration for staying and non-employment factors being important to leaving are findings that have also been supported by others (Han & Appelbaum, 2016; Hazen & Alberts, 2006).

In addition to identifying important factors in international students' initial career development and mobility decisions, a handful of researchers have analyzed the processes and experiences associated with beginning a career (Liu, 2009; Monahan, 2018; Shen & Herr, 2004). These researchers have found that beginning the job search process and thinking about careers was associated with confusion and a lack of clarity regarding available options and how to pursue those options. For example, Shen and Herr (2004) found international students were unaware of career service offices and what services those offices offered. As a result, these students were broadly unable to fully grapple with the complexities of looking for work and remaining in their host countries. Recognizing the ambiguity of this experience, Liu (2009) investigated the relationship between acculturation and self-efficacy in the career-search process and found that students who reported higher levels of adjustment to the home country and institution also reported higher levels of self-efficacy in the job-search process. Similarly, Lin and Flores (2011) found international students demonstrated higher levels of self-efficacy in the career-planning/job search process when they had higher levels of verbal support from family and faculty, and/or when they had higher levels of accomplishments and performance in their fields.

Widely missing from the aforementioned studies, however, is a recognition of the policies (such as OPT) that enable international students to consider beginning their careers in the United States in the first place and how those policies might shape related experiences and decisions. McFadden and Seedorff (2017) have argued that navigating regulations regarding international student employment is primary to their experience. They have also suggested that these regulations are poorly understood by faculty, administrators, employers, and the students themselves. Using survey data collected from random samples of international students (1,422),

career development professionals (373), and employers (84), Balin et al. (2016) found one third of the students, two thirds of the career service professionals, and half of the employers reported limited understandings of work authorization (visa) regulations. Such findings indicate that, when preparing for and experiencing OPT, students might struggle to access knowledgeable persons who can effectively guide them through the process.

Overview of the Optional Practical Training Program

This section provides a more thorough overview of the Optional Practical Training (OPT) program, exploring enrollment trends and exploring relevant policy discourse. OPT is a program designed to allow international students studying at U.S. HEIs to complement their education with a practical work component. This program functions by extending the F-1 student visa by 12 months and allowing students to obtain employment in a field directly related to their area of study (8 CFR § 214.2(f)(10): Practical Training). As an educational component for international students, OPT was first outlined in the 1964 Justice Department regulations. The Optional Practical Training program as it currently exists was enacted in 1992 by Justice Department Regulation (57 Fed. Reg. 31,954). According to Title 8 of C.F.R. part 214 subsection (f), an OPT enrollee "may apply to United States Customs and Immigration Services (USCIS) for authorization for temporary employment for optional practical training directly related to the student's major area of study." In 2008, the Department of Homeland Security (DHS) under the Bush Administration set a precedent by creating a new category of STEM OPT and expanded the allotted time of stay for students graduating from designated STEM programs by an additional 17 months on top of the originally allowed 12 for a total of 25 months. Observers believed this move was intended to prevent skilled, U.S.-educated international students not included in other skilled migration programs (e.g., the H1-B) from having to leave the country (Anderson, 2017a;

USCIS, 2008). The Obama Administration further extended the STEM provision to 24 months for a total stay of three years (Redden, 2016; USCIS, 2018).

Functionally, OPT is initiated by students who are required to submit a petition to the designated school officer (DSO) at the HEI in which they are enrolled to request an extension of their I-20 (the legal document issued by the enrolling HEI that allows students to remain in the U.S. under an F-1 visa). Next, students must file with the USCIS to be formally authorized to remain and work under their F1 visa. There is no limit on the number of individuals who may receive OPT extensions. As a result, few petitions are rejected each year (Ruiz & Budiman, 2018).

Once OPT is obtained, students can engage in related employment while they are a student (the pre-completion option) or after graduating from their degree programs (the more popular post-completion option).[1] Applicants for OPT are not required to secure a job offer before applying for the program. Successful OPT applicants, however, must begin their OPT-compliant employment within 60 days of graduation to maintain legal status under the extension. Under OPT, individuals are not required to stay with one employer, but their total days of unemployment may not exceed 90 days overall (USCIS, 2018).

Data trends. The number of students taking part in the OPT program has grown exponentially, surging from 40,000 students in 2006 to over 220,000 in 2019 (IIE, 2020). Notably, the growth of students taking part in OPT has tempered broader trends characterized by declines in international student enrollments at other levels. Due to this growth, the OPT has become the primary mechanism for hiring foreign skilled workers in the United States (Ruiz & Budiman, 2018). Compared to the H1-B skilled temporary visa program (a program with a

---

[1] Post completion is the only option offered by the institution from which the participants in this dissertation graduated and as such was the status they pursued upon attaining their degree.

65,000 per year cap decided by a lottery), OPT's relatively open application criteria can be a

safer bet for students weighing the uncertainties of applying to these programs. As the OPT is

initiated by the student rather than the employer, the program lightens these potential employers'

filing and fee burdens.
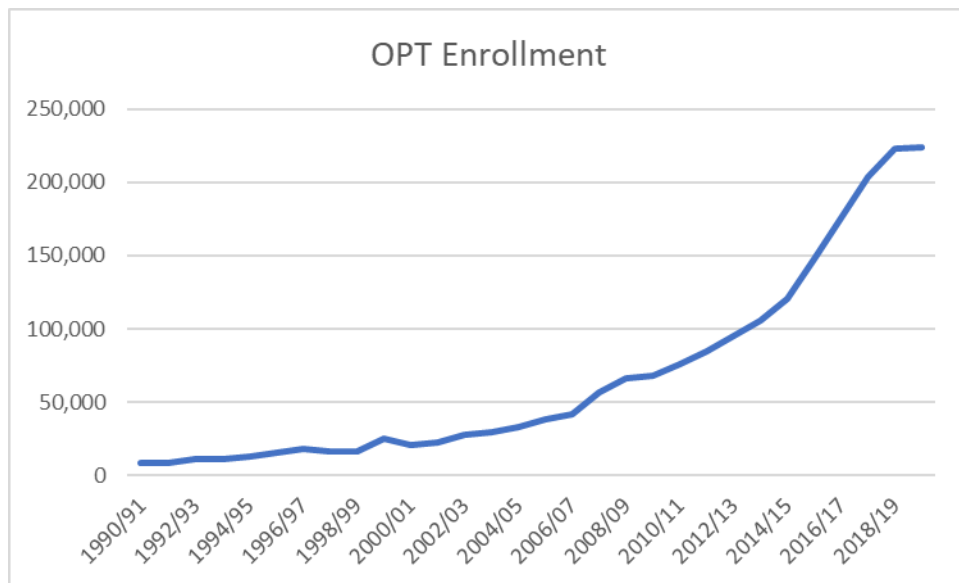
Figure 1. OPT Enrollment Trends. Compiled with data retrieved from IIE (2020).

  Country of origin. Analyzing OPT data from 2004 to 2016, Ruiz and Budiman (2018) of

the Pew Research Center concluded three-quarters of the 1.5 million OPT enrollees during this

period came from Asia. Students from China and India were combined to account for two thirds

of the total (IIE, 2018). Historically, students from India have led in the numbers, accounting for

over 440,000 students or one third of the total from 2004 to 2016. In the latest count, Indian

students on OPT reached 75,390 (IIE, 2019). Since 2013, however, China has grown to compete

with India as the leading sending country of students taking part on OPT. In the 2017-2018

academic year, Chinese students reached 65,680, growing 900% in 10 years to account for

roughly a third of the total number of students in the program. After China and India, South

Korea and Taiwan maintain the third and fourth spots of leading countries of origin for OPT students with 7,714 and 4,496, respectively (IIE, 2018).

STEM enrollment. The recent growth in the number of students choosing to remain in the United States under OPT can be at least partially attributed to policy changes involving the STEM extensions in 2008 and 2016. Prior to the initial extension in 2008, STEM graduates were surpassed by those who obtained degrees from non-STEM fields. In the eight years following the 2008 STEM extension, graduates with designated STEM majors enrolling in OPT grew by over 400%, whereas those studying in other fields grew roughly by 50% in the same time period (Ruiz & Budiman, 2018).

Levels of study. Students from various levels of study (associates, bachelors, master's, and doctorate) have each contributed to the growth of OPT. That said, students with master's degrees contributed the greatest share compared to those with other degrees. Between 2004 and 2016, international graduates with master's degrees far outnumbered all other degree holders under OPT, making up 57% (840,800) of all graduates in the program (Ruiz & Budiman, 2018). This observation may not be surprising as international students have historically tended to enroll in graduate programs (including master's) at greater rates than undergraduate programs (IIE, 2019). As such, this pattern in OPT could simply be a continuation of historical trends. Yet, once again, like the growth in STEM graduates, this change might also be attributed to policy changes regarding the 24-month extension enacted in 2008. From 2004 to 2007, the number of master's degree recipients on OPT *dropped* by seven percent. Since 2008, however, the numbers *jumped* by 322% up to 2016 (Ruiz & Budiman, 2018). This implies that the growth in OPT enrollment can be attributed to the OPT designation and extension.

Location of enrollment. Of the graduates taking part in OPT, more than half (56%) who participated between 2004 and 2016 obtained degrees from public colleges and universities. This broad observation aside, the three top host institutions for students who eventually go on to enroll in OPT are all elite private universities—the University of Southern California (27,100), New York University (26,800), and Columbia University (22,600) (Ruiz & Budiman, 2018). Regardless of an HEI's geographic location, major metropolitan areas in the United States have attracted the greatest number of international students. For instance, the New York City metropolitan area (including northern New Jersey) attracted the greatest number of OPT participants (over 200,000) between 2004 and 2016, followed by Los Angeles and Boston. Ruiz and Budiman (2018) demonstrated that, in addition to attracting OPT students who obtained degrees outside of the region, major metropolitan areas have also been the most effective at retaining students who obtain degrees from local institutions. These geographies, particularly the concentration of graduates in metropolitan areas, may inform and shape elements of the OPT experience, as indicated by the participants in my study who grappled with moving from the suburban Midwest to costal metropolises.

Policy discussions. As with any policy, OPT has its share of proponents and detractors. In this section, I present the ongoing legal and scholarly debates regarding OPT. The arguments comprising these debates are primarily anchored to the economic concerns of employers and labor advocates. Although OPT enrollees may not be unaware of these debates and the details of the program's regulations (McFadden & Seedorff, 2017), what follows demonstrates the precarious position of the policy. In spite of this, these debates have the potential to shape the OPT experience—particularly if policy changes are imminent.

Support for OPT. One argument in support of the program is that OPT (particularly the STEM extension) is beneficial for U.S. business. Many proponents of OPT point to the shortage of highly skilled talent in the U.S. workforce and see *temporary foreign workers* as a means to fill this void (Nell & Sherk, 2008). This is particularly pointed as, in some tech majors, internationals students dominate enrollments. For example, according to the National Science Foundation's Survey of Graduate Students and Postdocs, 79% of all computer science and 81% of all electrical engineering graduate students were international students in 2015 (Anderson, 2017b). Advanced tech companies, particularly those in communications technology (e.g., Microsoft, Facebook, Google), have been vocal supporters of OPT (Grimm, 2019). In his 2008 testimony to congress, Bill Gates argued that foreign workers can make up for a lack of capacity in the U.S. labor market, as it has failed to provide the sufficiently skilled labor demanded by the growing tech sector (Network World, 2008). He stated:

> First, we need to encourage the best students from abroad to enroll in our colleges and universities and, if they wish, to remain in the United States when their studies are completed. One interim step that could be taken would be to extend so-called Optional Practical Training (OPT), the period of employment that foreign students are permitted in connection with their degree program. Students are currently allowed a maximum of 12 months in OPT before they must change their immigration status to continue working in the United States. Extending OPT from 12 to 29 months would help to alleviate the crisis employers are facing due to the current H-1B visa shortage. This only requires action by the Executive Branch, and Congress and this Committee should strongly urge the Department of Homeland Security to take such action immediately. (Bill Gates March 12 testimony to congress, quoted in Network World, 2008)

Here, Gates's words adequately encapsulate the economic rationale for supporting OPT and programs like it. Furthermore, some scholars and immigration advocates have claimed that, without these programs, businesses would simply relocate their enterprises overseas to ensure access to appropriately skilled workers (Lewin et al., 2009).

Opposition to OPT. Despite broad employer support for OPT, opponents have argued that OPT workers displace similarly skilled U.S. citizens. Malkin and Miano (2015) have specifically posited that these policies are the outgrowth of corrupt deals between high-tech billionaires and politicians to undercut skilled U.S. workers by providing low-cost, foreign alternatives. Additionally, a prominent labor union filed formal complaints against the OPT program, alleging that the DHS enables OPT enrollees to unfairly, even illegally, displace U.S. workers and drive down wages. In 2016, the Washington Alliance of Technology Workers (Washtech) filed a civil complaint against the DHS and USCIS, claiming the OPT program authorized "non-student aliens to perform labor on F1 student visas" (Complaint No. 1:16-cv-1170, 2016, p. 2). Washtech further claimed that the H1-B visa is the appropriate legal channel—not OPT—for allowing skilled foreign workers to temporarily fill labor shortages in the United States.

Meanwhile, other opponents have questioned the legal parameters of the OPT program. In particular, Miano (2017) of the Center for Immigration Studies has argued that, as part of the F1 student visa, OPT was never meant to permit work beyond that required for training purposes by the degree granting institution. He further articulated that OPT is a regulation and not a law, claiming the current legal understanding of the program in no way allows foreign students the right to work under student visa status (Miano, 2017). According to this interpretation, the only

legal regulation that allows foreign students to obtain employment on their F1 visa was a three-year probationary program that terminated in 1993 (Complaint No. 1:16-cv-1170, 2016, p. 7).

In April 2017, the District Court in Washington D.C. dismissed the Washtech suit on the grounds that Washtech did not have standing to sue the DHS regarding the initial OPT regulations and the subsequent 24-month extension. In June 2018, however, this 2017 District Court decision was overturned in the U.S. Court of Appeals for the District of Columbia (NASFA, 2018). The suit now goes back to the District Court where they will revisit Washtech's assertions that the DHS does not have the standing to establish or extend OPT.

As of this writing, it is unclear how the Washtech lawsuit will proceed and whether it will result in a verdict against the DHS. Compounding this issue are rumors that have been circulating since early 2017 regarding the Trump Administration moving to alter or eliminate the policy and do away with the Bush and Obama Administrations' extensions of foreign STEM graduates' stays (Anderson, 2017a). In a leaked draft of an executive order, the Trump Administration indicated it was seeking "reform [of the] practical training programs for foreign students to prevent the disadvantaging of U.S. students in the workforce…" (NAFSA, 2017). If these plans come to fruition, an altered OPT policy has the potential to greatly disrupt the flow of international students into U.S. HEIs. Such were the conditions that saturated the political environment in Fall 2019 when I interviews the participants for this dissertation. In addition to influencing the plans and experiences of graduates detailed in the following chapters, this disruption could have dismal repercussions for HEIs that have become ever more reliant on full-fee paying international students to fill funding gaps (Cantwell, 2015), especially for graduate programs in STEM that have traditionally been filled by international enrollees (Anderson, 2017a). While conducting interviews and drafting the final chapters of this dissertation, the

uncertainties about the future of OPT was a significant factor shaping participants'

considerations and current realities.

Summary of the Literature and Situating the Question

The above review of the literature draws from conversations and research in a variety of

subjects in higher education and beyond, each of which touches on different parts of the OPT

experience. The sections on the internationalization of higher education and student mobility

explore how international students are situated within broader discussions in higher education

scholarship, particularly in terms of such mobility's alignment with internationalization plans of

governments and HEIs. Within and beyond the higher education literature, discussions of "brain

mobility" and transnationalism have informed my understanding of how individual experiences

contribute to mobility flows and migration patterns across the globe and has further highlighted

how such experiences are situated across those boundaries. This literature is indicative of the

first level of "betweenness" at the heart of my inquiry: being between home and host country and

remembering one's past, experiencing one's present, and imagining one's future between and

among these places. The final sections on STEM graduate education and study to work

transitions have informed my understanding of the second layer of betweenness: the experience

of transitioning from education to workplace.

To engage the ambiguities surrounding international students' post-graduation

experiences, I developed a theoretical framework through which I situated international graduate

participants' lived experiences transitioning from study to work on OPT within a broader context

of mobility (Garton, Grimm, & Kim, 2021). It was particularly important that this framework

account for the transnational dimension of their realities in order to highlight how polices like

OPT define the spaces students inhabit (school and work) and the relationships and encounters

within those spaces while explicitly addressing how such polices themselves are situated in broader societal, economic, and cultural contexts and trends. As such, a major component of this framework is Urie Bronfenbrenner's ecological systems theory (1979, 2005), which serves as a basis for considering the multiple systems in which individuals develop and make decisions. Such a tool allows for examination of the multiple social, political, economic, and cultural contexts in which international graduates are embedded. Global mobility through higher education is a complex phenomenon and thus requires a perspective that is able to center lived experience while recognizing the complicated and dynamic contexts in such mobilities are enacted and experience. Therefore, this study utilizes a *Traversing Systems* (Garton, et al. 2021) approach in exploring the experiences of graduates. This model (which I co-developed with colleagues in a project parallel to this dissertation) utilized a modified Bronfenbrenner (1979, 2005) ecological framework to center and explore the experience sof globally mobile individuals. Complicating Bronfenbrenner's approach, however, is the fact that international students move between systems in that they grow and live in one context (i.e., their home country) then transition to another (i.e., their host country) (Elliot et al., 2015; Garton, Grimm, and Kim, 2021).

Extant studies on international students have identified certain factors in each system (a student's home and host country) as important in shaping their decisions for going abroad and returning home. Although none of the studies referenced below explicitly incorporate enrollment in the OPT program nor utilize an ecological approach, their shared focus on factors that impact going abroad, experiences abroad, and returning home touch on similar dynamics through which we can recognize the complexities of movement between two variant ecologies.

Home ecology. In researching international academics with advanced degrees from HEIs in the United States, scholars (Han & Appelbaum, 2016; Hazen & Alberts, 2016; Lee & Kim, 2009; Medendorp, 2015; Szelényi, 2006) have identified family considerations as a major factor for drawing overseas graduates back home upon completing their studies. Lee and Kim (2009) found this to be a primary consideration for doctoral graduates returning to Korea, while Han and Appelbaum (2016) identified the family as the primary consideration among advanced STEM graduates who expressed intentions to return home upon completing their studies. Hazen and Alberts (2006) also found family and friends at home to be major factors for students deciding to return. Apart from return decisions, family factors also influence students' decisions to go abroad in the first place (Mazzerol & Soutar, 2002). Familial influences can thus be situated in an individual's home microsystem. In addition to family members, Medendorp (2015) found through a study of Chinese professors who obtained their PhDs in the United States that perceived peer interactions in the context of employment environment/opportunities drew them home, a consideration that spans the micro and exosystems.

More firmly in the exosystem, Wadhwa (2015) identified perceived entrepreneurial opportunities in students' home countries as a factor that some consider when deciding to return. Also in this system are the variety of policies governments employ to entice talent abroad to return to work in their home countries (Song, 1997; Zigarus & Gribble, 2015). As the world's largest contributor to internationally mobile students and scholars (IIE, 2018), China has utilized such programs to attract talent, offering prestigious positions, as well as financial and rehousing incentives to return and work in China (Zweig, 2006). Similarly, Szelényi (2006) found that, among the Chinese students in her study, government incentives where an important factor for those considering returning home.

Within the macrosystem, scholars have commonly recognized cultural familiarity as a factor for those who wish to return home to work and live upon completing their studies (Lee & Kim, 2009; Medendorp, 2015). For example, Szelényi (2006) found that "social responsibility" or a sense of duty to improve society in one's home country to be a factor that led students to consider returning (p. 82).

Host ecology. The overarching experience connecting all international graduates is that they have left their home countries to pursue an advanced degree abroad. It is thus within this context that decisions about future plans are shaped. Szelényi (2006) found students daily lives and interactions, as well as their social ties during their studies in the host country, were primary factors shaping the post-graduation stay-or-go decision. Specifically, she found that "newly formed personal relationships in the U.S. were a significant factor shaping the ways in which students conceived of their future professional opportunities and their decisions to migrate" (p. 79).

Factors in the host exosystem have been identified within the literature as major considerations for students weighing the option of remaining in their host country (Cantwell, 2011; Hazen & Alberts, 2006; Szelényi, 2006). Hazen and Alberts (2006) found 64% of respondents in their survey identified "better job/career opportunities in the U.S." as a motivation for remaining beyond graduation (p. 209). Han and Appelbaum (2016) have noted that students with STEM degrees find U.S. employment opportunities to be a significant incentive for those wishing to stay. Beyond job consideration, it is also important to recognize the legal structures and programs that help retain international graduates. Programs such as OPT fall into this category as they provide students with a pathway for employment in the United States (Grimm, 2019; Tremblay, 2005). Finally, in the macrosystem, graduates considering whether or not to

stay have also identified quality of life in the United States as well as identification with U.S. culture and society as factors that influence their decisions to stay (Hazen & Alberts, 2006).

Given recent patterns of mobility, particularly among the highly educated (Basch et al., 1994; Robertson, 2013; Vertovec, 1999), it must be acknowledged that modern forms of movement are neither unidirectional nor permanent. Thus, as I approach my study of the lived mobilities of international STEM graduates, I consider how individuals are implicated in complex mobility patterns, subjected to and interacting with variant systems as they traverse contexts. The *Traversing Systems* stance (Garton, Grimm, & Kim, 2021) provides a way to conceptualize the complexities of existing/moving between/among divergent ecologies. In particular, this approach allows me to focus on exploring the lived experiences of international graduates while also acknowledging that their experiences and choices will be influenced by the spaces they inhabit and how those spaces shift over time. Applied to this study, the utility of this stance is that it does not presuppose or predict outcomes or directionality. Rather, it centers the person within the system, drawing attention to subjective experiences while endeavoring to account for the contextual embeddedness of those experiences in an interconnected world. Such a tool allows me to approach the study of lived mobilities to pay attention to the spatial, temporal, and relational elements of these experiences.

Chapter Three: Methodology and Methods

In this chapter, I outline my orientation to knowledge, to research generally, and to the project at hand. I present the epistemological and philosophical traditions in which this study is grounded and detail the methodological tools and techniques used for data collection and analysis. I then share important background information on the storytellers involved in my study and the procedures I followed to conduct responsible qualitative research. To begin this work, I first share my positionality as a researcher in relation to this study.

Positionality

Growing up in a farming community in rural Ohio, I never dreamed my schooling and career would transport me across borders. Before college, I had only traveled outside of Ohio a handful of times for trips with the high school band. Pursuing a career in international education was nowhere near my radar. However, a study abroad in Korea and a close friendship with my Chinese teacher eventually sparked my interest in all things international. I pursued a master's degree in international relations and was poised to begin a career in the Foreign Service. Then life shifted and I circled back to education: teaching English at a Chinese university and working as a guidance counselor before returning to pursue a PhD in higher education. Although it had never been part of the plan, I realized that all that I had been doing personally, professionally, and academically was focusing my attention on the intersection of international politics, mobility, and education. When I began this PhD program, I thus had a general idea of what I wanted to do. In my graduate school admissions essay, I wrote something to the degree of *I want to better understand policies that states use to attract, train, and retain, global talent.* Accordingly, the question posed in this dissertation covers all three elements, with specific attention to the third.

In addition to my intellectual interest in this topic, there are also particular elements of my personal experience that factor into my emotional investment. Living and working abroad placed me in a precarious position where my existence in China was dependent on visa policies and various levels of compliance with national, provincial, and local regulations. For example, as well as needing a work permit to be employed in China, I also had to secure a residence permit at the provincial level. I had to register locally with the police any time I moved apartments or entered or left the country. When traveling, I was only permitted to stay at hotels that had authorization to *house foreigners,* which were often difficult to locate. All of these elements added to the stress of trying to make my way as a young person fresh out of college in an unfamiliar cultural and linguistic environment. This experience was reflected (to varying degrees) in the stories participants shared during their interviews.

At this point, it is important for me to acknowledge the extreme level of privilege I was afforded in China. In fact, there were at least five layers to the privileging I experienced: I am a man, I am white, I am from the Global North, I have advanced formal education, and I am a native English speaker. Each of these layers combined to place me among the most privileged people in China and enabled me to access social and economic opportunities that are not afforded to others. Although I was a "foreigner," the othering I experienced was generally an extension of these privileges. For example, the salary I received as a teacher and guidance counselor was at least one multiple higher than my similarly qualified Chinese colleagues because of my native English-speaking ability, my degrees, and the fact I am white and male. Relatedly, while the graduates whose stories are featured in later chapters of this dissertation struggled with demonstrating their viability for credentials and for the authority to remain in the U.S., I was issued a "foreign expert license" to work at a Chinese university when I was newly

graduated with only a bachelor's degree and without professional experience beyond the farm and restaurant work that put me through college. In the concluding chapter, I return to focus on the ways policies privilege and expediate the mobilities of some persons while impeding that of others.

Epistemological and Methodological Grounding

In this study, I do not seek to prescribe, measure, test, or design an intervention. Running counter to most research on education policy dominated by neoliberal market and economic rationales (Ellison, 2014), I seek understanding and interpretation of lived experience of those whose experiences and choices are contoured by the influence of policy. As such, a qualitative approach (Cresswell & Proth, 2017) grounded in an interpretivist tradition (Thanh & Thanh, 2015) is most appropriate for my inquiry. Within the interpretivist tradition, reality is viewed as socially and contextually contingent (Mack, 2010). Knowledge about reality is thus best derived from interacting with those who live it. Within my study, I focus on participants' lived experiences, with "lived experience" referring to the notion of "being in the world." Meaning comes with our everyday encounters with the world. Our coping reveals to us that which is possible, that which constitutes our *being* as human (Heidegger, 1927). In essence, this dissertation is firmly grounded in a humanist approach to research (Lewis-Beck et al., 2004). It is my sincere hope that the stories participants shared will succeed in helping readers better understand the lives of others whose experiences of mobilities are shaped directly by policy. In reading these stories, I hope my readers might wonder, *what it is like* to experience such transitions, mobilities, and betweennesses. I do this guided by this overarching research question:

> *How do international STEM graduates experience the in-between space associated with the Optional Practical Training Program?*

Why phenomenology? Van Manen (1997) has advocated for a *hermeneutic phenomenological* approach to investigating lived experience. In this approach, phenomenology can be interpreted as the study of experience, "particularly as it is lived and as it is structured through consciousness" (Henriksson & Friesen, 2015, p. 1). In this context, *experience* is not the accumulation of knowledge or events over a lifetime; rather, it is something humans *undergo.* Hermeneutics is the theory and methodology of interpretation (van Manen, 1997), sometimes referred to as both a science and an art (Findlay, 2008, 2013; Henriksson & Frissen, 2015). Taken together, hermeneutic phenomenology is the scientific and artistic exploration of *experience* and *meaning.* Both hermeneutics and phenomenology share roots in the European Continental Philosophical tradition, which includes the foundational work of Husserl (1913) and Heidegger (1927) that was later advanced by Gadamer (1960), Giorgi (1975, 2008), and others. Specifically, Heidegger (1927) advanced the work of Husserl (1913) with the concept of *Dasein* or *being in the world.* According to Heidegger (1927), meaning is emergent and happens through the conversational relationship between a (human) being (*Dasein*) and the world. *Dasein*, Heidegger's term for the human being, emphasized both the noun and verb form of *being* and asserted that it is only through recognition of the verb that we can come to understand the noun. Out of the philosophical soil of phenomenology, a new research approach, *hermeneutic phenomenology*, has emerged (Findlay, 2008; Friesen et al., 2015).

In alignment with hermeneutic phenomenology as a research methodology, it was my intention to devote particular care to asking people to share their experiences with me and to allow me to share their experiences with others. As it seeks to learn from contextually contingent individual experiences, hermeneutic phenomenology is similar to other qualitative methodologies (Findlay, 2008). It differs, however, in that its aim is always to "return to

embodied, experiential meanings" (Findlay, 2015, p. 17). Merleau-Ponty (1976) has cautioned that phenomenological accounts "must stick close to experience, and yet not limit itself to the empirical but restore to each experience the ontological cipher which marks it internally" (p. 157). In other words, the intent of this study, as with all phenomenological endeavors, is to *return to experience itself*. I am not interested in examining biographical details, but rather how we might learn from these accounts in a way that looks upon the experiences of others as our own *potential* experiences. Rather than abstract the categories, concepts, and theoretical perspectives from the experience (as is the intent of many qualitative studies), I dedicated myself to the task of always returning to the experience, seeking what is shared through the particular and sharing the meaning of these experiences by engaging with participants accounts.

Gadamer (1960) has referred to this returning as part of the *hermeneutic circle*, or the never-ending cycle of continuously refining our understanding of the parts in terms of the whole and the whole in terms of the parts. The hermeneutic phenomenological approach to research also rejects the assumptions and approaches of the *transcendental phenomenological* research tradition (grounded in the work of Husserl and Giorgi) that distinguishes the possibility for researchers to "bracket" previous experience or knowledge in pursuit of the ideal essences of others' experience and consciousness. The hermeneutic approach similarly "rejects any 'transcendental' claim to meaning or any research conclusions that are fixed once and for all" (Henriksson & Friesen, 2015, p. 1). As such, hermeneutic phenomenology aims to continuously challenge and refine our pre-understandings in the pursuit of more truthful understandings grounded in the lived experiential accounts of others.

The role of the researcher and interviewee partners. In phenomenology, to approach research means scholars must "question the way we experience the world, to want to know the

world in which we live as human beings" (van Manen, 1997, p. 5). For van Manen, conducting this type of research is an act of caring, whereby we attempt to become more fully part of the world. Phenomenologists call this inseparable connection between *being* and the *world* "intentionality." As a researcher, this puts me in an intentionally close relationship with the persons and experiences in this study (Findlay, 2008). In attempting to know and understand, I recognize that "we can only understand something or someone for whom we care" (van Manen, 1997, p. 6). As a result, I engaged participants in a relational, dialogic uncovering of the OPT experience. After all, it is through the "intersubjective space between" that researchers and co-researchers can come to know about another's experience (Findlay, 2008, p. 13). It is through these intentionally relational research practices that I have sought to do justice to their accounts.

Research Design and Data Collection

As a phenomenological study, the primary *data* collected for this project was *lived experience accounts* (Kim, 2016; van Manen, 1997). While other qualitative approaches might ask participants to reflect on *how* or *why* they made certain decisions, a phenomenological approach requires that participants share their experiences in narrative form as closely as possible to the *natural attitude* in which these stories were experienced. In phenomenology, the natural attitude refers to the pre-reflective way humans experience the world; we are aware of what is around us and our feelings but rarely interrogate those thoughts or feelings while having them (Gadamer, 1960). Asking interviewees to share their experiences in narrative form provided the opportunity to return to a natural attitude through which they were better able to recall the thoughts and feelings essential to the experience (van Manen, 1997).

As lived experience is essential to phenomenological research, narrative inquiry (Clandinin & Connelly, 2000; Kim, 2016) is key to collecting such accounts. In narrative

49

inquiry, the primary means for collecting narrative data is through interviewing and inviting storytellers to share their experiences. In this dissertation study, I used a combination of both conversational (van Manen, 1997) and semi-structured (Clandinin & Connelly, 2000; Kim, 2016) interview techniques. The conversational approach specifically guided my approach to the interviews, as it was important to me to give participants the agency to take the lead in determining which parts of their narrative to share and how. I followed up with prompts to keep conversations within the parameters of the research question and encouraged participants to remain within a natural attitude.

      Conducting interviews. According to van Manen (1997), the conversational interview opens with a single prompt and allows storytellers to share their narratives as they see fit. The role of the researcher in the conversational approach is to ensure interviews remain aligned with the phenomenon of interest and that the experiences shared are those participants have lived. Researchers do so by asking participants "to think of a specific instance, situation, person, or event" (p. 67). In this study, I opened with an introduction of myself and the purpose of the project, and asked participants: "*Can you tell me a little about yourself and how you decided to pursue your education abroad?*" I asked this question because I wanted to get to know the graduates and how they had come to this point in their journeys. Knowing that these journeys are complex—full of excitement, challenge, and potentially heartbreak—it was important for me to allow participants to determine which parts of their lives to open up to me, which relationships to share, which experiences to highlight. This openness allowed us to establish trust and comfort and further allowed me to develop an understanding of the graduates' journeys up to the point of interest for my study: the study to work transition under OPT. In responding to the opening prompt, participants opted to disclose, to various depths and degrees, the relationships and

experiences they felt defined their stories up to the point of graduating and beginning work. These conversations ranged from a few to 45 minutes depending on how much participants chose to disclose.

Eventually, I redirected our conversations to my research question by asking: "*Could you share when you first started considering taking part in OPT?*" Following the initial prompt, my role was to continually encourage interviewees to return to the experience itself, prompting them to consider "*What was that like?*" Or to "*provide an example.*" As participants introduced different experiences or relationships in the telling of their lived mobilities, my prompts further encouraged them to share more about those relationships and experiences. Again, while I was interested in learning as much as possible about the different types of relationships and experiences that defined the study to work transition under OPT for them, it was important to me that my questions did not probe unnecessarily into topics that could potentially cause participants discomfort. Only after graduates guided the conversation to particular experiences or relationships did I ask follow-up questions of those areas. Through this approach, each of the nine interviews I conducted produced abundant stories and rich descriptions into how the study to work transition is experienced by international graduates and how such a space is influenced by relevant visa policies that enable and constrain their choices and experiences during this time and within this space.

Research Procedures

In the following sections, I outline the practical considerations for conducting this study, including concerns related to IRB, recruitment, consent, confidentiality, and trustworthiness.

Institutional Review Board. Upon receiving approval for this study by my dissertation committee, I applied to the Michigan State University Institutional Review Board (IRB) to obtain

approval to conduct human subjects research. After a brief review period, the IRB found this study abided by their policies and procedures. I did not begin the study nor contact potential storytellers until receiving this approval.

Storytellers. As previously mentioned, the focus of this study is to understand the lived experiences of persons who cross borders in pursuit of education and remain in the United States to take the next steps in their lives and careers. To effectively narrow the scope of my study, I focused on people taking part in the OPT F1 visa extension option. I further narrowed my inclusion criteria to focus on OPT enrollees who have graduated with degrees in STEM fields, the largest contributor to the growth in OPT enrollment (Ruiz & Budiman, 2018). To be included in my study, participants had to be: (1) recent graduates of a U.S. HEI with a (2) degree in a designated STEM who were (3) currently enrolled in OPT.

As OPT enrollees with STEM degrees have the option to extend their OPT for an additional 24 months on top of the initial 12 months, I was able to sample persons at various points in their OPT experience (i.e., first year, second year, and third year). The purpose of doing so was to obtain a broader picture of how time affected the OPT experience and which factors of the experience were more salient for participants over time. This study thus included the stories of nine persons who met the aforementioned criteria.

Access and recruitment. After receiving IRB approval, storytellers were recruited with the assistance of the Office for International Students and Scholars (OISS), the administrative unit at the case university responsible for international student services. With the support of a colleague in OISS, I sent an email to graduates from designated STEM programs who were currently enrolled in OPT/STEM OPT. This email received an enthusiastic response, and I was able to find nine graduates eager to share their experiences in support of this dissertation study.

Upon identifying participants, I contacted them with an IRB approved recruitment email informing them of the purpose of my study and their rights and responsibilities in participating.

Informed consent and care. Potential interviewees were notified of the details and purpose of the study so they could willingly and freely decide to take part or not. As the IRB requires a formal, formatted informed consent process, I proceeded by sharing the informed consent via email prior to conducting interviews. As informed consent is a formal document and requires a signature, I am aware that the *formal* informed consent process may, for good reason, cause stress—particularly for non-native English speakers who are presented with a formal document and asked to sign. I experienced this very issue in my previous work with English as a second language speakers. Therefore, in addition to providing the formal IRB-required informed consent document, I also prefaced each interview by going over the form and allowing interviewees the opportunity to raise questions about the study, what I was asking of them, and the risks associated with participation. As I asked interviewees to share their lived experiences only to the degrees with which they were comfortable, I did not anticipate significant risks for those taking part in the study. That said, recalling these experiences (especially as they were concurrently living them) had the potential to evoke stressful and emotional responses. In the event a participant exhibited emotions or behaviors of concern, I was prepared to direct them to appropriate counseling and other resources. Fortunately, although our conversations went into significant depth, such services were not required.

Confidentiality. This study was explicitly designed to protect the confidentiality of each participant. As care is as the heart of a phenomenological approach to research (van Manen, 1997), shielding participants from potential harm associated with the sharing of their stories was of the utmost concern while designing and implementing this research. The lived experience

accounts of those in my study often required storytellers to share their thoughts and emotions to the extent that some did not want others to know or be able to attach stories to their tellers. As such, I took the following precautions. First, each interview took place in a time and place of the interviewees' choosing to maximize their comfort and security. Second, these interviews were recorded on a password-protected recording device. Third, all recordings and interview transcripts (transcribed by me only) were stored on a password-protected computer to which only I have access. Fourth, all data, including transcripts, was anonymized with the use of pseudonyms and by removing or replacing identifying information. Each person was asked to provide a pseudonym of their choosing. If they did not have a preferred pseudonym, I selected one for them with their approval. In addition to these precautions, I made every effort to heed requests to protect participants' identities and stories by masking details such as names, institutions, and employers. All participants were requited from one large, Midwestern research university, hereafter referred to as MRU.

Phenomenological Narrative Analysis

Upon collecting the lived experience accounts of those in my study, data analysis proceeded with an initial reading of the transcribed interview transcripts. The transcription process also enabled me to intimately connect with the interview content as I listened to the tonal quality as well as pauses and emphasis in participants' responses and narratives. As I transferred these conversations to textual transcripts, I made note of these features. The transcription process further provided an opportunity to re-*listen* to the stories and pay closer attention to pauses, laughs, and conversational tone.

To analyze these accounts, I utilized an approach combining *hermeneutic phenomenological reflection* (van Manen, 1997) and *narrative analysis* (Clandinin & Connelly,

2000). Both of these approaches include the element of *thematic analysis.* For van Manen (1997), thematic analysis refers to the "process of recovering the theme or themes that are embodied and dramatized in the evolving meaning and imagery" of the account (p. 78). He offers three approaches for isolating thematic statements: (1) the holistic approach, wherein the account is considered as a whole; (2) the selective or highlighting approach, wherein the interview transcript is searched for statements or phrases that "seem particularly essential or revealing about the phenomenon or experience being described" (p. 79); and (3) the detailed or line-by-line approach, wherein the transcript is examined in small sections to explore for meaning. In the process of writing and re-writing, I used all three approaches in my analysis but primarily relied on the second and third approaches to spotlight "appropriate phrases" and "singular statements" that demonstrated the essential meaning of the themes (p. 79).

Similar to van Manen's (1997, 2014) *hermeneutic phenomenological reflection,* Clandinin and Connelly (2000) advocated for narrative analysis to engage in "reading and rereading field texts" to develop a coherent account (p. 131). Doing so often implicates researchers in the task of archival or data management to handle the vast amount of material generated through interviews. As Clandinin and Connelly have suggested, I utilized an electronic qualitative data analysis program (NVIVO) to aid in the process of data analysis. NVIVO allowed me to keep track of themes as they emerged from each account and also allowed me to move more easily across and among themes and accounts. During the writing process, however, I engaged more directly with the transcripts to continuously return to the experience itself and to center participants' voices as I refined a phenomenological rendering of this transition experience.

Elements of phenomenological analysis. To organize themes, I relied on the previously outlined conceptual framework in conjunction with *guided existential inquiry* as outlined by van Manen (1997, 2014). Existential inquiry focuses analysis on the: (1) relationality, (2) corporeality, (3), spatiality, and (4) temporality of an experience (Merleau-Ponty, 2012). Van Manen (2014) claims that the above elements "are existentials in the sense that they belong to everyone's lifeworld—they are universal themes of life" (p. 163). Relationality refers to one's relationship with others within an experience. To inquire about relational elements in phenomenological analysis, I asked: how are relationships experienced while taking part in OPT? Corporeality, meanwhile, draws attention to embodied or sensory elements. In investigating this element, van Manen encouraged those using a phenomenological approach to ask, "How and when do we become aware of our bodies? How do our desires, fears, cheerfulness, anxieties incarnate themselves in the world in which we dwell?" (p. 164). This required me to be carefully attuned to the descriptions of emotion and feeling in the lived experience accounts shared with me. Inquiring into spatiality requires us to reflect on how space is experienced in a given phenomenon. For this dissertation study, elements of space were a particularly salient to the OPT experience as storytellers shared about belonging to or traversing spaces (e.g., borders, school, work, etc.). Finally, the notion of temporality draws researchers' attention to understanding how time is experienced relative to a particular phenomenon. For people on OPT, time may be experienced in association with an approaching expiration date for the program or with deadlines for filing necessary documents.

Integrating an ecological approach. In conjunction with the four existentials outlined above, I utilized the revised ecological model outlined in the preceding conceptual framework section to grapple with and understand participants' lived experience accounts regarding OPT.

This revised model specifically aided me in conceptualizing the spatial, relational, and temporal elements of the OPT experience, as it enabled me to locate these elements within the various and, at times, conflicting systems of home and host ecologies. While a phenomenological approach advocates *returning to the experience itself* and warns against undue abstraction and theorizing, theory can be used in the interpretive elements of a study, following and as a supplement to a phenomenological description (van Manen, 2010). This conceptual framework particularly shapes how I situated the lived experiences explored in the following findings chapters—namely how policy contours the spaces inhabited by international graduates transitioning from study (school) and work (employer). Although this framework is not featured prominently in the structure or language of the findings in Chapters Five and Six, significant sections of the discussion chapter lean heavily on the traversing systems framework to situate these findings within existing scholarship and to advance and nuance ongoing empirical and theoretical conversations regarding international student mobility and transnational experiences: lived mobilities.

Writing as process. In conjunction with identifying themes, a concurrent stage of data analysis involved the writing process itself. In the words of van Manen (1997):

Writing fixes thoughts on paper. It externalizes what in some sense is internal; it distances us from our immediate lived involvements with the things of our world. As we stare at the paper, and stare at what we have written, our objectified thinking now stares back at us. Thus, writing creates the reflective cognitive stance that generally characterizes the theoretic attitude in the social sciences. (p. 125)

In accordance with the above quote, data analysis included more than simply assigning codes or themes. Rather, it required reading and rereading, writing and rewriting. Through each step, I

engaged in the hermeneutic circle (Gadamer, 1960), moving from parts to the whole and back again, always with the intent of returning to the experience itself. The conceptual model allowed me to account for the parts of each experience, but writing and rewriting helped me analyze the experience as a whole. In conceptualizing and drafting the findings sections, my thoughts and approach went through at least three iterations as I grappled with the best way to thematize and represent the international graduates' experiences.

I eventually settled on crafting findings chapters that explored the initial study to work transition and considerations of what comes next, which are explored in Chapters Five and Six, respectively. Concurrently, I worked through different ways of incorporating and (re)presenting the various stories shared with me. I eventually decided to center the stories of five graduates—Dhara, David, Ida, Emma, and Xiaoyi—to highlight the themes explored in these chapters. I drew on quotes from other participants to substantiate the overall telling in sharing the *urgency, ambiguity, impermanence,* and *unsettledness* in these experiences. It is my hope that readers will find in the following chapters a narrative account of the OPT study to work transition for international graduates whereby they may be moved through textual emotion and textual understanding to "a more deeply understood worldly engagement" (van Manen, 1997, p. 129).

Introducing the graduates

In this section, I introduce the five graduates whose stories of transition from study to work under OPT and considerations for the future fill the following pages and give life to this dissertation. Demographic information for all the participants can be found in Appendix 1. While all the stories shared with me deserve detailed sharing, for the purposes of this dissertation, I opted to detail the narratives of five participants Dhara, David, Xiaoyi, Ida, and Emma. Voices and experiences from the other participants, Gabe, Casey, Kai, and Jian are woven throughout

the introductory and closing sections of each chapter as well as in the discussion and conclusion chapters of this document.

Dhara

Before arriving in the United States to pursue her master's degree in construction management, Dhara attained a bachelor's degree in India in civil engineering. She began her graduate studies already thinking ahead to the work opportunities a master's degree would afford. When weighing options between study destinations, Dhara reported being attracted by the "diversity," "work ethic," and "the dignity of labor" she perceived to be valued in the United States. At the same time, as she considered studying internationally, she had to convince her parents who were "more worried about the financial implications" and how Dhara might manage living alone so far away from home.

Upon beginning her studies, Dhara reported having trouble initially adjusting to the U.S. style of teaching and learning. At first, she found the way knowledge is taught and assessed in applied assignments rather than examinations to be particularly overwhelming. Yet, Dhara adapted quickly, reporting that, "the first three months were really rough. After that, I just loved it. Once you get into the rhythm, it's really great." Soon, Dhara began engaging more with peers and professors both inside and outside of class and was invited by "the most senior professor in the department" to be on his research team.

During the second semester of her four-semester program, Dhara began to look for an internship. She found the process overwhelming, particularly as it differed drastically from hiring in India, where "companies would come and then you have to make a couple of written tests. And then when you clear it, they call you for an interview. That is just how it goes." While looking for internships for the summer in the middle of her program of study, Dhara missed out

on an internship opportunity in Ann Arbor because she did not have a car or driver's license. However, she was eventually able to find a position closer to the university and passed her driver's license test.

Through her final year of studies, Dhara was extremely busy, doing "10 hours of co-op and 10 hours of research" each week in addition to her fulltime coursework and job search. Despite her preparation before and during her master's program, as Dhara looked ahead to finding employment beyond graduation, she was still not confident in her ability to land a job. Even with the gumption that enabled her to secure research and internship opportunities during her master's studies, Dhara's story in subsequent chapters demonstrates the degree to which the visa policy environment caused her to feel pressure during the transition from study to work and to consider options in and outside the United States as she planned her future beyond OPT.

Emma

Emma came to the United States from New Zealand in 2012 to pursue her undergraduate degree on an athletic scholarship for rowing. She explained that "the whole college athletics thing does not exist really outside of the U.S." and that rowing at a U.S. university would provide her the opportunity to pursue her studies. "I know that rowing is not going to be forever. So, I'd rather get an education." Choosing among multiple offers, Emma selected MRU partly because she had an uncle who had previously lived in Michigan and a cousin who attended the university.

Rowing was a major component of Emma's collegiate experience, influencing her social, academic, and professional experiences. As she adjusted to life in the United States, the rowing team provided her with a "community of people that have to be friends with you." Practices and training took up 20 hours of her week. During competition season, Emma was away with the

team as they bussed across the country to competitions. She was a starter on the team for three years, sidelined only when a shoulder injury required surgery and four months of physical therapy.

Emma selected engineering as her major, knowing it was going to be a challenge. As she entered more intense coursework in her sophomore year, she began to ask herself, "are you sure this is what you want to do?" With the support and encouragement of the advisors available for athletes and her mother, she resolved to press on, eventually making it through a difficult academic adjustment.

As she neared the end of her degree program, Emma began to look for internship opportunities. After "a few goes at trying to find internships," Emma began to recognize that "it was like being a foreign student and knowing that it's a whole different ballgame for internships" that was making her search difficult. About to give up on the search, Emma reached out to "one of the girls on the team" whose parents owned a company in Detroit. It was through this connection that she landed an internship and she recognized that she was fortunate, unlike many of her international peers, to have these types of relationships. As we will continue to learn in the subsequent chapters, Emma's story demonstrates that, even with these connections, the transition from study to work is complicated by the policy environment that shapes that particular transition.

Ida

While pursuing her undergraduate degree in Iran, Ida developed a dream of studying abroad. However, she did not seriously entertain it at that time because she was "too close to [her] mom." It was later while pursuing a master's in computational physics at a university away from her hometown where her peers were pursuing international plans that Ida began to seriously

consider further education outside of Iran. She was initially accepted into a master's program in France where she was awarded a scholarship. Ida had "everything set up" and was looking forward to beginning her studies. She was derailed, however, when she was not able to secure the student visa, "because the situation in the two countries was weird."

When her plans to study in Europe fell through, Ida shifted her attention to applying for programs in North America, receiving "three admissions from Canada [and] five from the United States in different states, with funding." She eventually decided on MRU but was detoured again because of visa challenges. She had "applied for the visa May 2010 and was supposed to be here in fall [but] missed the fall semester because [she] could not get [her] visa."

When she was finally able to begin her coursework a semester delayed, Ida reported the initial challenge of studying with native English speakers and "convincing people that [she is] a good physicist," despite using the same materials (in English) during her previous program. After this early hurdle, Ida began a study group with a peer who helped her get through the challenging work and eventually started outperforming her classmates in courses and in the lab. She described her time studying for her PhD as a "rollercoaster experience," with low points accentuated by challenges related to "being a woman and minority" in a less-than-welcoming discipline and working in a lab that "was not the best for many reasons." Despite excelling in the lab, Ida was looking ahead to life beyond her studies and research.

After nearly seven years in the PhD program, Ida was anxious to graduate and explore new opportunities. Given her negative experiences in academic labs, she was eager to find a position in industry. Yet, as we will see in later chapters, Ida's intentions to attain employment outside of the university were hindered by hiring regulations that create additional barriers for international graduates.

Xiaoyi

Xiaoyi began looking for master's programs abroad after attaining her undergraduate degree in digital media and communications in China. After graduation, she gained "a lot of internship experience in the related field," in the marketing departments of Chinese Internet and media companies. Through these experiences, Xiaoyi realized she was not on a career path she enjoyed. "I don't really like the work of repeating the jobs every day the same," she reflected. While comparing graduate program internationally, she sought advice from peers in her field who had studied outside of China and eventually settled on the United States with a specialty in human-computer-interaction for her studies.

When she arrived in Michigan, Xiaoyi was wary of the new environment, especially as she knew little about what to expect. However, she reported that, "after a month, I found that nothing is wrong...everything is good. I have found that most people are really, really friendly." Quickly, she found that life in Michigan was "very easy to get used to. Yes, everybody is very friendly and life is very simple. You just go to school, go to a supermarket and talk to the people with similar backgrounds as you." She continued with this routine throughout her two-year master's program and returned to China during the summer to intern at a communications company.

As Xiaoyi neared the end of her master's program, she seriously contemplated whether or not she wanted to remain in the United States to pursue employment. She was satisfied with her experience in China and knew she would be able to get a job easily. Yet, as she looked ahead to life beyond graduation, she was not quite ready to go home. As we explore Xiaoyi's experience in the following chapters, we will learn how her post-graduation trajectory was shaped by the policy guidelines and timelines that govern the study to work transition for international graduates and how her plans for the future were contoured by visa considerations.

David

David began college at a university in Venezuela, studying only one semester before being recommended to and securing a competitive government scholarship to cover the expenses of completing his undergraduate degree at a university in the United States. Although studying in the United States had long been an aspiration for David, it was the scholarship funding that allowed him to pursue the "great education" he anticipated receiving. He was selected to come to MRU and, there, began his studies in engineering.

David excelled in his coursework and, by his senior year, he was eager to join in the senior design project that would place him in a company to gain experience. He explained he was excited to be "working at Whirlpool…on the main project." Then, he "got the news that [his] scholarship was gonna be dropped." "Because of political situation in Venezuela," he sighed, "they had to drop everyone." David expressed, however, that he felt lucky to have had a "good experience with the dean of engineering," who found a way to pay for the senior design course. "It looked really bad for the university to have like one of the guys in senior design to drop out right in the middle of the project," he expounded.

After finishing the senior design course, David had "to go back home and try to put the money together" to complete his coursework. After working for a year and with loans and support from his extended family, he was able to secure the funds to cover his "damn expensive" international tuition fees and finish his degree. Reflecting back, David admitted "I don't know if it was that experience, but I felt more mature." As he looked ahead to life after graduation, David hoped to be able to find a job in the United States. Yet, as the following chapters detail, David had to navigate complicated and frustrating visa-related policies in his search for employment, a process intensified by a perceived lack of opportunity back in his home country.

Chapter Four: Transitions from Study to Work: Confronting Urgency and Ambiguity

Dhara, David, Jian, Emma, Ida, Kai, Gabe, Xiaoyi and Casey are among the hundreds of thousands of international students that choose the United States for their studies and who remain after they graduate to attain employment in the country. Yet, because of their international status, the school-to-work transition is vastly different than that of their domestic peers. A primary reason for this is that international graduates must contend with and submit to visa policies and hiring regulations that *enable* and *constrain* their ability to stay in the country. We typically think of the study to work transition as implicating the *school* and the *employer* as graduates cross the threshold from the former to the latter. For international graduates, however, there is another player that determines the contours of that transition: the state (U.S. federal government). Due to their state sanctioned *foreign* status, international graduates must navigate a series of regulations as they prepare to graduate, find, and begin employment in the United States. The participants in this dissertation study all participated in the Optional Practical Training (OPT) F-1 student visa extension program to work in the United States after graduation. Thus, for these graduates, despite their articulated intentions to remain beyond their studies, realizing these intentions requires that graduates navigate these transitions in accordance with visa policy strictures.

The OPT program lays out the state's conditions for international student graduates in finding and maintaining employment. As such, international graduates' transition from study to work within the context of the OPT's guidelines and timelines. In this chapter, I explore how international students experienced their study to work transitions in the United States under OPT, paying particular attention to how related policies shaped how they experienced their transitions. In the first part of this chapter, I draw on salient quotes from participants' stories to depict how the spatial, temporal, and relational elements of their experiences were saturated with a sense of

urgency and ambiguity. I then present the stories of five participants—David, Dhara, Xiaoyi, Emma, and Ida—to convey what these transitions were like.

What I discovered and what I share through the narratives in this chapter is that graduates experienced this transition as one filled with urgency. The English word "urgency" is derived from the Latin root *urgere*: to push or press. In addition to the notion of pressure, our modern usage of the word also incorporates an element of *requiring or calling for prompt action*. To experience urgency, then, is to experience a state where a pressing force demands timely action. Here, two components are necessary to understand: pressure and time. As I describe throughout this chapter, the urgency international graduates experienced—the pressing force—comes from the federal government, which sets and enforces the rules for how the transition from study to work must be made and the timeline in which it all must happen. International graduates feel this urgency in the form of pressure to do it right and do it on time.

The urgency described in the graduates' stories in this chapter is driven by the direness of the consequences: if they do not do it "right" and "on time," they can lose their status and be deported. Of this possibility, Casey noted, "My visa doesn't allow me to stay here if I don't apply for the right visa extension. . . . You don't want to mess around with my visa because I could get kicked out of the country." Casey's words accurately and directly sum up the stakes international graduates face in transitioning from study to work under OPT—i.e., they can be "kicked out of the country" if something does not go according to plan or if they do not find and start a job "in time." In other words, deportation is the consequence for making a mistake, for being deemed "out of status" (i.e., the state designation for violating the conditions of one's visa). These consequences place international graduates in markedly vulnerable positions. The transition from study to work directly implicates a change in status as international graduates

shift from full-time enrollment in school to full-time employment. While wrapping up their studies, preparing for, and beginning work, they must consider this status change amidst the urgency of moving seamlessly between coursework and employment. They know that the time for transition is short and that there is no room for mistakes. For international graduates, three things need to come together simultaneously to make their transitions smooth: graduation, securing employment (with a start date within the allotted period), and processing requisite paperwork.

Compounding this urgency is the fact that graduates have a limited period of time to make this transition. International students are required to begin OPT, enroll in further education, or leave the country within only 60 days of graduation. Furthermore, because the processing time for OPT requires around 90 days, students must choose a start date for their position and begin their OPT paperwork before graduation. Notably, every participant in my study chose an intended OPT start date *before they had a job offer*. Upon setting her start date, Dhara shared: "I was like, 'oh my god,' I had to get a date, so I picked May 21 as my start date. So, I was like, 'Oh god, I have to find a job.'"

Understandably, students are eager to find jobs and secure start dates by the time they graduate and certainly by the date they indicated when filing their OPT paperwork. However, if graduates are unable to begin a job by the time their intended start date arrives, they begin to deplete the 90 days of unemployment allotted to them as part of the 12 months of OPT. Kai emphasized the importance of this timing, noting, "You have to focus on the time and you have to [be] timed really good with this." Similarly, each participant indicated that knowing they had limited time to find and start a job added a great sense of urgency to the transition experience, the job search in particular. Again, Dhara's words encapsulate the urgency of this time

constraint: "My first thought was like, I need to have a job before me. I don't want this 90-day period to expire, because that's time ticking."

The start dates for five of the participants came and went as they searched for employment beyond graduation. This was not for lack of effort. Nor was it because they were unqualified for their positions. Rather, as international graduates whose pathway from study to work in the United States is mediated by the OPT policy, the challenge is not knowing who knows what about the policy and whether potential employers are making decisions based on a clear and accurate understanding of the policy or a *lack* of understanding.

Despite the urgency of finding employment to maintain status, anyone who has navigated a job search knows that attaining a job is not nearly as simple as wanting one. One must spend time identifying possible positions for which they are qualified, then they must apply for said positions and be accepted. International graduates must do so under a very specific set of circumstances in which employers must understand and be willing to abide by the federal government's regulations for hiring international workers. This situation implicates the second theme that emerged in participants' stories: ambiguity. The Latin origin of "ambiguity" is *ambiguous* and is comprised of two roots: *ambi* (both) and *agere* (to drive). Thus, to experience ambiguity is to be driven in more than one direction at once. Despite the urgent push to make their study to work transitions "correctly," and on time (according to the state), graduates experience the ambiguity of being driven in multiple directions at the same time. Together, the two roots *urgere* and *agere* speak to the intense pressure participants felt during this time.

Graduating and looking for a job is a precarious position for anyone on the precipice of such a major life transition. Of this, Emma emphasized, "It's hard to tell. Is it just because I'm foreign or is it because I don't have the skill set you are looking for?" Such frustrations broadly

encapsulate the type of ambiguity faced by international graduates. Any student graduating and entering the job market must contend with the convoluted process of trying to understand themselves, their skills, and how they might fit into the employment field. In addition to demonstrating their fit for a job, however, international graduates must also find employers who are willing to navigate the additional paperwork and regulations the state requires for hiring employees who are not American citizens or green card holders. This can be especially problematic as students often do not know what employers know and don't know about the policy or whether they would be willing to hire them. Of this, David remarked, "I mean, there is not like a list of 'so we hire or we don't hire OPT students.' So, yeah, [during] the process, you're not going to know who will [hire]." Such ambiguity shapes graduates' experiences and decisions during these transitions.

This ambiguity is rooted in the fact that those involved in the transition—the school, the employer, the student—have varying levels of knowledge about the policies that govern the OPT transition for international graduates. Graduates must thus become knowledgeable about the policy in a space where the advisors guiding them and the employers they hope will hire them may not have even heard of OPT, let alone know how to guide somebody through the process or how to hire them under the policy. Moreover, graduates must contend with the ambiguity of not knowing whether a given employer's unwillingness to hire an international student stems from their misunderstanding of the policy or from somewhere else (i.e., xenophobia). That foreign employees fall outside of equal opportunity employment protections (i.e., it is legal to refuse to hire some because of their foreign status) is an ambiguity that adds another layer of vulnerability to the experience.

This ambiguity is further compounded by the fact that many at the university who support students in their study-to-work transitions (faculty, advisors, etc.) also have varying degrees of knowledge about OPT regulations. For example, Emma claimed, "the college of engineering does keep a pretty close eye on which companies are willing to work with foreigners." Xiaoyi, however, had a vastly different experience. In a conversation with an advisor in her program, she shared:

> [I asked him] "What should I do after I graduate if I want to work for some time in the U.S.? Is there any advice for this? I heard that there is OPT and I want to know: what's the process to work with it?" And he just gave me some answer that, "yeah, we had a few international students before, and I think some do find a job here." This is the only work he talked about [with] me.

The above exchange indicates how school spaces, like employment spaces, are also populated with persons with varying capacity to engage graduates on OPT. The OPT policy therefore, is important in influencing the temporal, spatial, and relational elements of graduates transitions as experienced through urgency and ambiguity.

The urgency and ambiguity broadly outlined above showed up in similar and different ways in participants' stories. In the remainder of this chapter, I present the narratives of five international graduates to demonstrate how they experienced and addressed the *urgency* and *ambiguity* of transitioning from study to work in the United States on OPT. I specifically do so by centering participants' perspectives to explore how OPT policies and procedures shaped the graduates' professional and personal trajectories as well as how the pressures added by the OPT policy pervaded their lives beyond work.

David

David's experience of finding a job in the United States upon graduating with his

bachelor's degree in engineering took on a particular form of urgency. He came to the U.S. on a

Venezuelan government scholarship but his studies were interrupted in his junior year when the

funding for his program evaporated. Without the government-sponsored scholarship, David

informed me that he had to return home to raise money before returning to complete his degree.

After a semester of working and scrambling to assemble the funds needed for tuition, David

came back to the U.S. more determined than ever to land a job after graduation:

> I knew better what I wanted to do career wise. So, I applied to specific companies that I
>
> want to work in. I mean companies that are *reachable*. So, in 2017, I came back. I started
>
> applying and I started going to the career fairs and whatnot. It was really stressful, so [I]
>
> had that. You know how my family would…[sighs] every time they had to pay for the
>
> semester, I [thought], I, *need* to find a job. But at the same time, when you have an
>
> interview and you tell them—even if they really like you—and you tell them like, 'hey,
>
> you know, I need like a sponsorship.' They're going to be like 'oh we don't [provide]
>
> sponsorships or do sponsorships for like entry-level people.' That job search is really
>
> hard. Not only for STEM OPT, but just OPT international students, you know.

As the above indicates, David was not sure whether employers would be willing to hire him or

whether they would be knowledgeable about hiring international graduates under OPT. He

further explained that, as a result, "my approach was not to tell them I was international at the

career fair; only after I had some time to sell myself." In this face of this urgent ambiguity, David

needed to develop strategies for navigating these precarious and high stakes encounters with

employers and employment spaces.

Yet, David informed me that this approach only got him so far in the process. He added, "But you know, it always came down to 'oh, are you going to need a sponsorship or something like that?' I'm not gonna lie, right? I would say, 'yes.' And then they would be like 'uh, I gotta go check that.' But it was always a 'no.'" When I asked David how many times this happened, he replied, sighing, "Bunch of times. Boeing, General Electric, Intel, BMB, DTE Energy, Verizon…a lot of them." Knowing there was too much to lose, David was not willing to bluff and blow his chances.

Through the above exchanges we see how David quickly learned that his international status was going to be a liability, creating a layer of ambiguity that complicated an already challenging and urgent job search. He was apprehensive of broaching the topic of sponsorship because of a sense of vulnerability and fear they would dismiss him outright. Moreover, because companies often do not have overt policies regarding whether or not they are willing to hire international applicants, David had to approach potential employers not knowing if they would even consider hiring him given his status: "I mean there is not like a list of [whether or not they hire] OPT students. So, yeah, [during] the process, you're not going to know who will…" He trailed off. I followed up by asking if he was just trying to figure it out, to which he responded, "Exactly, you have to dive in and go for it, I guess." Aware that his options were limited and there was only so much he could do to overcome these ambiguities, David knew that he would need to "dive in" if he were going to persevere.

Like many of the other graduates I spoke with, David described the application process through which he spent "pretty much the whole year" of his final semesters searching for a job. Although he had hoped to attain a job offer by graduation in May, he found himself still searching after attaining his diploma. Additionally, because he had intended to begin OPT upon

72

graduation, he had submitted the requisite paperwork the previous February. David explained

that the stress of trying to find a job while his 90 days of unemployment (according to OPT)

ticked away added extra pressure to the already high-pressure search process. After more than

half of his allotted unemployment time had passed, he finally landed a job offer in June. In

asking him how he handled the pressure, he explained:

> But in any case, I guess I don't allow myself to be depressed. I'm not going to do
>
> anything that way, right? So, I just kept looking. When I graduated, I had to move back
>
> with this Aunt that is in Miami. Because obviously they kicked me out from campus. So,
>
> I was there until I got this job. Yeah [sigh], thankfully, I managed to start the job.

With his optimism and a little support from his family, David recounted that he was eventually

able to weather the wait to the date when he finally started OPT. He did not even consider

returning home upon graduation as an option. With the political and economic turmoil in

Venezuela, he saw his engineering degree and a job in the United States as his and his family's

only viable future. This added extra urgency to an already urgent and ambiguous job search. In

learning that his options were limited, David took it upon himself to become knowledgeable

about visa policies and how they would affect his hiring so he could anticipate how employers

might respond to him or the policies. In the process, he learned how to play the game by

adopting techniques for gathering information and tiptoeing around potential employer concerns

regarding "sponsorship."

Dhara

Dhara came to the United States for a master's in construction design after achieving her

undergraduate degree in engineering in India. Intending to stay and work after completing her

degree program, Dhara began preparing for the study to work transition early. Before applying

for graduate school, she learned about OPT and other similar programs in countries like the UK and Australia. These visa considerations not only shaped which country she studied in, but also the specifics of each program and school.

In particular, Dhara emphasized that having the opportunity to gain practical work experience in the United States was a primary driver for studying abroad, "It was always my plan to work after that and I knew about the system I [would] have to go through, and I knew how difficult it is." Moreover, after learning that attending a program with a STEM designation would allow her to remain in the United States for a total of three years on STEM OPT (compared to one year if the program did not carry the STEM designation) was what led her to choose her program at MRU: "So, I am glad I did that because a lot of my friends here, they've entered other courses and they had no idea about this. So, they were not in STEM courses and they just suffered later. That's why I came to MRU." As Dhara made plans to come to the U.S., she was already thinking about her time beyond graduation. She knew that, through OPT, she could potentially stay and work after her studies. As such, upon arriving to begin her master's program, she was already feeling a sense of OPT-induced urgency to prepare herself for the study to work transition. To be eligible for the program, however, Dhara knew she would first have to land a job within the allotted time period.

Recognizing the importance of prior work experience in attaining a job upon graduation, Dhara began her preparation early. She attended construction management career fairs in hopes of landing a summer internship between her two years of study, noting:

> [When] I actually started, I had no idea how the jobs were supposed to work. Basically, just after I came here in the fall, there was a career fair. But I had really no idea how to approach people, how to write, because I had never done it before. So, I have no idea

how it works. It was really bad, really awkward. I didn't get any calls after that, obviously. Yeah, I guess I didn't do well in that.

Here, Dhara explained how being new to the United States greatly complicated her understandings of herself and her ability to plan a career in an unfamiliar employment environment. She did not look upon this experience as a failure, however, but as an opportunity to learn and better improve for subsequent career fairs.

Dhara explained that, although the hiring situation in India is stark and causes frustrations, she viewed finding a job in the United States as a challenge she was up to. She specifically elaborated on her thinking while preparing for her next chance: "The second year [was] 2017. Then, I started applying for internships again. Me being an international student [made me think] maybe also you need to *apply a certain way* and reach out to people *in a certain way*, because I just wasn't getting many interviews." By this time, Dhara had recognized that her international status was creating additional challenges to the job search process. These challenges prompted her to reconsider her approach and develop strategies for navigating these spaces and relationships. Despite the obstacles, Dhara gleefully reported that "I got two calls. I killed it, and I just knew like how to blend in." Yet, even in landing the calls/interviews, she experienced further challenges from employers who were wary of OPT and her international student status:

So, I was looking forward to this career fair because I was confident, you know, that I had some experience in [the] American construction industry. I could speak about it and all that, and I was looking forward to that. But I did get two calls and I interviewed with them. But I did not get a call back. And during the career fair, again, like *you have to go around explaining* because the whole system has become so much more strict and

75

difficult that, even if employers want to hire you, they hesitate because they're like [sigh]. So, they straight up tell you, "*we do not hire international students.*" So, it gets really difficult.

In light of this, I asked whether she had information on employers' willingness to hire international students before approaching them. Dhara responded, "They look at you and they know, right? That you are international. They know, right?" I clarified with, "Yeah, but I mean, but you don't know that they're going to reject you before you start talking [do you]?" Dhara sighed and continued:

I mean, I still did my research on that. Because in my senior batch of students, again, there were a lot of Indian students. So, I had spoken to them and they knew which companies hire and which don't. So, then, I had some feedback about who to approach and who to just not approach at all. I had shortlisted [companies] and everything and all that stuff. Yeah, I had a plan.

Here, Dhara explained how she "spent considerable time" in the months between career fairs preparing for her performance. She noted that during course presentations—specifically during times with her professor practicing for approaching employers and perfecting her resume—she built the confidence to go to the next career fair. Learning from her international peers, which employers might hire her and becoming more familiar with immigration policies enabled her to know who to approach and how to explain the policies to them, all of which she did in an effort to reduce the ambiguity of the job search.

"You were ready?" I asked.

"I was ready!" Dhara confirmed.

Given the way she had shared her account thus far, I expected Dhara's next words to begin the story of how she landed her current position at the career fair. "So, yeah, that happened," she said. Then, her voice dropped, "but it didn't go well." She continued:

> Yeah, I was really anxious around October through December. I was like, "okay, I just have one semester." And because, you know, on your OPT, you [have] just three months. So that is like a ticking clock and I do not know what I am going to do because I wanted to have a job in hand before I graduate.

This quote highlights Dhara's feelings of urgency in finding a job. She further told me she approached her job search by "applying everywhere" and developing "a lot of ways to apply," which included sending random requests to "strangers on LinkedIn" who were working in the construction industry.

It was through this method that Dhara received a promising message: "Hey, are you looking for jobs? Our company's looking for people. So, would you send your resume?" Surprised and excited that her inquiry would receive direct solicitation, she began the application process. It was the day after submitting the paperwork for OPT that she received a phone call and a job offer. "It was amazing," she exclaimed as she shared her thoughts about receiving the job offer:

> My first thought was like, I need to have a job before me. I don't want this 90-day period to [expire] because that's time ticking. But somewhere in my head, I knew I would land a job. But I had no idea it would happen that way, that someone would just approach me and I just [end up] getting the job.

As she told her story, I could see Dhara was excited about the opportunity and pleased that her hard work was beginning to pay off.

Dhara then shared the details of her formal phone interview, explaining that she learned the company had never hired someone on OPT, nor had they ever hired an international employee. It thus fell upon Dhara to explain to the company that she could work for them for up to three years if they were able to attain the E-verify status required for the STEM OPT extensions. The company was enthusiastic about hiring her and re-assuring her that, "okay, we are on board. Whatever it takes, we will do it for you."

Dhara told me that it was at that moment she decided she was going to take the job. "If you give me a job offer, I'm just taking it because this is the one thing I was concerned about." I understood this as her wanting to overcome the ambiguity of the job search process and mitigate the urgency of having a job to make a smooth transition from study to work. She explained that the fact the company was willing to accommodate the necessary extra work for hiring an international student and the fact they brought it up helped to set her mind at ease:

> I mean, I did give other interviews still before. And then you bring up this thing [visa status]. I mean, you're obviously scared to bring it up because then you're like, "what if they just don't hire me because of this issue?" But it was awesome…they just started the interview by asking: "So there are a lot of people from your country around here?" Like they're seeing more international students now and that made me feel a little better. So, they decide they're like not familiar with the process at all, but they said that they were willing to do it.

The relief in Dhara's voice as she told me this part of the story was palpable. Due to the urgency of finding a job and the ambiguity regarding the employer's willingness to engage in OPT, Dhara expressed a sense of vulnerability in talking about visa status. Hearing that that this employer

78

was willing to go through the necessary paperwork despite a lack of familiarity with the process was exactly what Dhara needed to hear to make her decisions. As she explained the process to her future employer and received a positive response, Dhara overcame the ambiguity by directly informing them about the related policies.

Despite beginning her program thinking ahead to working in the country after graduation, her story highlights the urgency and pressure international graduates feel finding jobs under OPT. As she learned more about the job market and prepared herself to be more competitive, she also learned she knew more than many employers about hiring international graduates. Dhara attempted to overcome this ambiguity by devising strategies for identifying potential employers who might be amenable to hiring an international graduate. Unlike David, Dhara was able to secure a job before graduating and did not have to use any of the unemployment days she was worried about expiring. Nevertheless, the time constraints of needing to secure a job within 90 days of graduation caused her considerable stress and to quickly accept the first offer she received. She especially felt a sense of vulnerability during her job interview, as she had to take extra steps to carefully and cautiously explain what would be required if they wanted to hire her.

Xiaoyi

Like Dhara, Xiaoyi came to the United States already thinking ahead to gaining work experience in the country upon graduation, even as she admitted that a primary reason for studying here was "to see people in a different life or see the world." As Xiaoyi began to search for master's programs in the United States, she explained that her search was guided by her desire to acquire skills that would transfer to the U.S. job market. Having gained some experience in the communications field after graduating with her bachelor's degree in China, Xiaoyi was excited to study in the United States but knew she wanted her master's degree to be

focused in areas where she could attain the most relevant skills necessary for success in her career field:

> I really wanted to learn something that is related to tech. Or maybe include some tech skills in the program. Actually, my bachelor major is communications. It is like "communication study." The only thing that I can do if I want to do a communications master's degree then, maybe, I will focus on articles or publications. That is not something I really want. So, yeah, I think that maybe my master's degree should be career focused. So, I wanted to find a major that has the greatest opportunity to find a job in the media field. Yeah, I think [it is] especially [hard] for international students and who are not the English native speaker.

As the above indicates, Xiaoyi knew she would need to select something that would allow her to be competitive on the job market after graduation, particularly given her international and non-native English status.

She was particularly attracted to the Human Computer Interaction (HCI) program at MRU, but was disappointed to learn the advisors—despite touting the career prospects of program graduates—were not familiar with policies related to international students, particularly policies that affect when and how they seek employment post-graduation:

> When applying, I asked a lot of questions to the advisor. And yet, actually, I don't think he has a lot of experience about internationals. Yeah, because I asked a lot of questions about like "what should I do after I graduate if I want to like work for some time in the U.S.? Is there any advice for this? I heard that there is OPT and I want to know: what's the process to work with it?" And he just gave me some answer that, "yeah, we had a few

international students before, and I think some do find a job here." This is the only work he talked about to me.

Although she was already thinking ahead to OPT while exploring graduate programs, Xiaoyi's story shows the precarity of having program advisors who were unfamiliar with the policy. This added additional ambiguity to her already ambiguous career search. She knew OPT was an option, but as she continued through her studies, Xiaoyi began to reconsider her goal of working in the U.S. after graduating.

I then asked Xiaoyi when she first started making plans for her OPT. Surprisingly, she informed me that "the decision to apply for OPT is a very sudden decision to me." She continued to explain her thinking during the time of application:

I graduated in May 2018 and, according to the policy, I have to apply [for] it within 90 days of my graduation date. And I made the decision. I remember very clearly…I sent the application at the beginning of April, so maybe I started the application, filling [out] all kinds of forms in the middle of March. Because before that, to be honest, I decide[d] not to stay in the U.S. for my career because my home is the capital of China. So, the technology industry is very developed. . . . And also, I went to an internship in Lenovo in Beijing, and I think it is a good experience. So, the industry, the career, and the internship experience meet my expectation very much.

Here, Xiaoyi explained that this internship, which took place in the middle of her program during the summer of 2017, had caused her to reconsider staying in the United States beyond graduation.

Xiaoyi also said she learned that, although she was thinking about OPT before applying for graduate school, she might have been too late:

Like in those days, I talked with some people [like] international students currently

working in Google or Facebook. They started to apply for their career and maybe

internship at the time they enter graduate school. So actually, my plan is very sudden.

And how I started my career also is a very sudden case because at that time, after I apply

for OPT, my OPT started the first day of July 2018 and, at that time, my thinking is that

maybe I can try to find a job within three months.

By this time, Xiaoyi had realized that finding a job in her field might be more difficult than she

originally imagined. Even as she began the tedious process of applying for OPT and looking for

employment, Xiaoyi continued to temper her expectations. She explained that she would use the

90 days of unemployment beyond graduation that OPT afforded her to apply for jobs and explore

more around the United States, noting:

If I've got a job, okay. I will go [take the job]. And if I don't, then I will go back. It's

very easy for me to get a job in China. So that is my thought. And I am not very

desperately wanting to stay in the U.S. at that time.

For Xiaoyi, the urgency to find a job within the allotted time was tempered by the knowledge

that she could go home to find gainful employment. In addition, doing so was an acceptable

outcome for her—a situation vastly different than the conditions David faced.

Yet, despite her take-it-or-leave-it attitude toward the job search process, Xiaoyi was

happy to attain two viable offers, one in Detroit and one in Palo Alto. She remarked that the job

position in California materialized through a connection with one of her professors whose friend

was launching a startup and looking for employees. With his reference, she received a job offer.

Despite this personal connection to the job in California, it was not what ultimately drove her to

accept that position. She explained her deliberations as she considered her options:

I made the decision because, at that time, I am in the interviewing process for another

company in Detroit. Because to be honest, I really want to stay in Michigan. Even if

Michigan has not a lot of positions in my field. So, it is kind of a pity. The interview

[process] with the company in Detroit is very, very long. And finally, I got that offer also.

But it has to begin in October. So, the interviewing process, it took like three months.

And, yeah, at the time I [had] already come to California. And, yeah [sigh]. Because OPT

has a time limit of unemployment, I was pretty in a rush, so I accepted the offer in

California.

This quote shows that Xiaoyi came to the United States hoping to use her graduate program as a

launching point into the U.S. job market with recognizable skills and a recognizable degree.

However, after encountering a lack of resources for helping international students in her program

find jobs and witnessing her peers struggle to find positions, she was ready to give up on her plan

to work in the United States after graduation.

Still, Xiaoyi felt pride in her ability to secure two offers; even if, in the end, she regretted

how the process forced her hand in which job to choose. Urgently needing to start a position to

maintain status, Xiaoyi had to choose the job with the position that started within the appropriate

time frame. From her experience, it is evident that the OPT regulations regarding the

unemployment period precluded her from pursuing a job that she desired, driving her to instead

choose a position in California. This particular outcome was a direct result of Xiaoyi's response

to the urgency of finding a job within the time allotted under OPT. What's more, this was all

experienced while simultaneously combatting the ambiguity of not knowing employers' motives

or how long their hiring processes might take.

Emma

Thus far, I have shared how the transition from study to work for international graduates is filled with urgency and ambiguity. In the stories presented above, the ambiguity and urgency were resolved, to some degree, when the graduates were able to find and begin employment. Yet, Emma's story illustrates that these conditions are not always overcome by securing a job offer in time. Sometimes, even when you do everything right, things can go wrong.

As she neared the end of her engineering program, Emma began the process of looking for internships and planning to secure a job. Reflecting back, she reported it was during these internships that she began to encounter difficulties related to her international status:

> Basically, you can get through the whole application and then you hit that thing where it's like, 'do you have the right to work in the like U.S.?' [and] 'Are you authorized to work in the U.S.?' And it seems [when] you hit that ["no"], their automatic filter is just weeding you out. Like they can say they're not, but that's bullshit. You know they are.

Emma was visibly frustrated by the ambiguity of engaging in such a process. Emma explained that, partly because of these challenges, she was finally able to find an internship through a family connection of one of her volleyball teammates; or, in her words, "good old-fashioned nepotism." For her, overcoming the initial ambiguity of finding an internship as an international student was made possible by her local connections, something she recognized was not available for all international students.

Having attained some experience from this, Emma gained more confidence and grew more comfortable operating and positioning herself within the U.S. job market. Being in spaces where she could engage with people from industry "made a huge difference." She explained it was "just like getting used to talking to people and getting used to talking about what I did at

work and how you can package that." Despite this growing confidence, Emma explained that she continued to confront challenges in her job search. She articulated her particular frustration with the ambiguity of it all, noting, "Yeah, it's hard to tell. Is it just because I'm foreign or is it because I don't have the skill set you are looking for?" Emma had explained that she had done everything to make herself legible to the job market, yet as this above quote demonstrates, she was frustrated by the ambiguity of navigating the transition as an international graduate, particularly as there was no way of knowing whether her trouble attaining interview offers was because of her incompatibility with the position or the company's unwillingness to engage her through OPT.

In the midst of a frustrating national job search, Emma was relieved to be contacted by a manager at the company at which she had interned. Inquiring about her job hunt, he asked, "are you still looking? Would you be willing to come back?" As she enjoyed her internship with the company, Emma decided to accept the offer, but quickly encountered another challenge. The company that hired her deals with "defense work," meaning Emma also needed to provide an additional work authorization before she could start working. She explained:

> So, obviously most defense companies don't deal with non-U.S. persons. Pretty cut and
>
> dry. Like, when I was an intern, it was very locked down. Like, I did not have access to
>
> [things] like drawings or prints, pretty much anything that was in any way controlled.

The company then informed her that the company would need to file additional paperwork (an "export permit") on her behalf with the federal government but that they did not know how long it would take to process.

So, despite having a job offer in hand, Emma continued to apply for jobs while waiting to hear back, unsure *when* or *if* the paperwork would be processed and she could begin working.

Even more concerning, Emma was "burning through" her days of unemployment waiting to

officially begin the job. Luckily, Emma was able to graduate and stay with extended family. In

telling her story, she recognized the importance of having this particular resource/option: "I was

super lucky that my aunt and uncle live here."

Emma further explained her frustrations with waiting and the "unglodly levels of stress"

during that time:

> At this point, I'm stressed to the max. I'm kinda just like moping around the house.
>
> There's nothing I can do, except to keep applying for jobs and keep running into the same
>
> wall. . . . So, at that point, I basically made the goal…if I don't get the job, I'm going
>
> home and we'll figure it out from there.

Here, Emma emphasized that she found this waiting particularly frustrating because she had

"applied pretty much as soon as (she) could for OPT" and had quickly found a job. "I wouldn't

wish that kind of stuck waiting period on anybody," she said, shaking her head. In the summer

after her graduation, Emma prepared to leave the country, as her status was to expire before she

could begin working. Despite the urgency to start and the ambiguity of the wait, she comforted

herself knowing she could always return home: "If this doesn't work, yeah, I'm going home."

"When did it finally go through?" I asked.

"Early August, like the first week of August. …my internship boss calls me and goes, 'it

cleared.' And I am like [gestured happily]…now I can sleep normally! So, I started like the

Monday after that."

Emma further noted feeling the pressure of needing to start the job on such short notice.

She said, "Yeah, I had to start immediately. Like, I can't burn through more [days] when I'm

burning through so many days. I can't." With a week to move and prepare to start work, Emma was struck when she began to consider and confront the other challenges of her actual move to begin work. "I don't have an apartment," she realized. Yet, she explained her appreciation and fortune in being able to use her connections from her time interning to secure temporary housing with a family connected to the company that often hosts "kids who are interning in Detroit."

Having momentarily resolved her housing concern, Emma encountered yet another snag as she transitioned to her new position.

> That was the one really basic thing for work, like health insurance won't kick in for 90 days. So that was also then having to deal with contacting MRU and being like "I need to extend my university health insurance for another three months." Yeah. It wasn't that bad. But [the] chasing around, getting all the right forms and paper or having to talk to [the] international students' office and then the same stuff over [at] the HR Department and thinking like, "can you just make this an online thing where I can just check the damn box?" Because this is like, "you are not helping right now."

In the above story, Emma acknowledged this was a difficulty she might have been able to avoid, "Admittedly, in hindsight, I probably could have been to work like, 'hey, I need health insurance,' and they would've done it. But this is my first job. I don't know what I am doing!" Her words here encapsulated the added ambiguity of navigating a job search for international graduates.

Not knowing what to do is a common experience for new graduates entering the workforce. For Emma, however, these anxieties were amplified by the ambiguous wait period caused by the "export permit" filings and the urgency brought on by her days of unemployment that were "burning away" as she navigated a search process unsure of how employers would

engage her under OPT and other related policies. Support from friends and family and knowing that she could always "go home" helped her maintain composure throughout this challenging transition from study to work and the policy driven wait period filled her with urgency to start a job in time. In her mind, Emma had done everything she could to overcome said urgency. She navigated a frustrating a job search and had landed a job by graduation but felt "ungodly levels of stress" while waiting to begin the job as her status in the United States hung in jeopardy for months.

Ida

As the narratives thus far demonstrate, international graduates experience urgency and ambiguity in their study to work transitions. Yet, even in cases where students are able to have a job lined up by the time they graduate, the urgency and ambiguity present themselves in different, yet equally salient ways. Like Emma, Ida confronted a serious of complexities *after* securing a job offer. These complexities challenged her to develop skills and knowledge beyond what she might anticipate. Her story demonstrates how, despite a variety of setbacks beyond her control, she was able to carve out her own path while transitioning from study to work.

After initially struggling to complete her degree, Ida graduated with a PhD in computational biology. The challenges she faced during her degree included an unsupportive and high stakes learning environment and working long hours alone in a lab to complete the work assigned by her supervisor. Of the six peers with whom she began her doctoral studies, she and a classmate from Taiwan were the only students to complete the degree, while four quit and one passed away. Originally planning to graduate in 2017, her classmates' passing strengthened her resolve to graduate as soon as possible: "I was ready to go." When her committee was not ready to allow her to graduate in the summer of 2017 as she had planned, she resolved to "secure [her]

next step before leaving…so that I can prove I have this thing." Ida urgently wanted to move on to her next step and convince her committee that she was ready to do so.

Ida explained that she eventually secured an offer from a high-tech company in New York City. With a start date in January 2018, she prepared to graduate in December, a month prior to beginning the job in the new year. Yet, despite sharing that she had landed a job, I could guess by her drawn out voice this was not going to be a success story:

> So, I got the job. . . . And the problem was that, as an Iranian, I had to go through a different level of security, which they called "export licenses." I had to obtain that export license to be able to work in a high-tech company. I [had to show] that…[I was] not transferring the high technology of the company to [my] own country, which is fair. I understand it. It was supposed to be three months of a clearance check and I was supposed to start in January. Then I got a call in February, like a month later. My OPT just started in January, so I was ready to go. I had applied, everything was ready. I got this call from that company HR saying that yeah, "the new president has changed the rules …"

"Of the company?" I asked for clarification. "No. Of the *country*," she declared, meeting my eyes with a look of recognition.

She continued, paraphrasing the February phone conversation with her would-be employer regarding the job she was meant to have started a month prior. She recounted that he'd said:

> "So, the government does not let people from your country keep working in their jobs. Or at least we don't know if it's going to happen or not. So, the waiting time of the export

license has changed." [I asked], "How much longer?" [He said], "We don't know." [I asked], "Can I get in?" [He said], "I don't know." [I then asked], "Can I still work remotely and not walk into the company?" [He answered], "No." Even if I was going to actually work there, I had to be escorted every time in and out of the building. It wasn't something doable for the company.

Throughout this part of the story, Ida was visibly frustrated by the compounding ambiguity regarding the start date and whether she would even be able to start work. I asked her how that felt, particularly to be treated like a threat. She replied, "Well, you know, honestly, I am used to it after many, many years of living in this country. But then this level was like a higher level. I had my PhD. I was on my OPT. My OPT was running." Ida explained here that she accepted the fact of her reality and directed her worry instead toward the urgency of the clock that was "already ticking," saying, "I got 90 days."

Seemingly numb to being regarded as a threat, what concerned her most was the limited amount of time she was permitted to be idle while maintaining her current visa status: "I got 90 days." Ida felt the urgency of making a smooth transition to working on OPT without risking her visa status. Moreover, because the company was unable to answer her questions regarding the export permit, Ida did not know when she would be able to start or what her employment would entail in the unlikely situation she attained the export permit.

Conscious of not wanting to exhaust her OPT unemployment time and risk losing status, Ida scrambled to find an unpaid, part-time position of about 20 hours per week in the middle of January after graduating, when OPT had officially started. She had hoped this position in the lab of a professor in her department would be temporary while she waited on the "export license" for the industry job with an already-passed January start date.

When she initially heard from the company about the difficulties regarding the export license, she was not sure how to react:

> But then, in February, when they called…I [thought], okay. This is too much. I can't. I mean, I'm screwed. I can't just stay basically. I don't know, it wasn't a volunteer job, but it was…I was not getting paid.

Under the assumption she would soon begin her new job in New York, Ida had ended the lease for her apartment in December and was staying temporarily with her sibling who was also a student at the time. Ida articulated how fortunate she felt to have her brother to fall back on during this turbulent transition when she felt stuck within other support.

When she learned she would be unable to start the job in NYC and recognized that it was unsustainable to continue working unpaid simply to maintain her status, Ida began applying for postdocs. She explained that "because my export license thing was still like in process…I wanted to actually have that option if that company lets me go." In other words, she needed another contingency plan to combat the ambiguity of waiting for a position she was not sure if/when she would be able to begin. During that time, she reflected on her PhD studies as she weighed her future options: "But then that's the time that I realized that staying in the dark rooms for doing experiments for hours and hours. I've done it for six years. I can't do it anymore. Yeah, I'm done."

Ida explained that she eventually landed an offer for a postdoc position and that "the guy was ready, but he was also pushing me to say yes or no." Grateful she had a secured a backup plan, Ida still struggled to determine what to do while waiting to hear back from her industry job: "OK, I'm here. I don't know what to do. Should I go? Should I not go?" Under the urgency to

select a job quickly, Ida was driven in multiple directions as she weighed whether or not to take the offer.

Recognizing that the postdoc would likely be a continuation of the work she had been doing as a PhD student—work that she was growing to despise—Ida began to consider alternative paths that would allow her to satisfy her status but that would also provide her with a meaningful way to apply her education. She elaborated:

> The [Texas postdoc] told me I have a month to decide. So, I started looking. And then there was a time I knew about biology education research here. But I didn't know exactly what they're doing. I was always shy because, I was always in the basement sitting in the dark doing experiments. I was never talking to other people around the department. I didn't know how to even start the conversation. So, then I saw a job post from the people there. I was like, "Oh, my God! This is really interesting! I want to do this!" So, I started pushing on that goal, going to her office, asking her questions and showing my interests. . . . Then, I gave up that job at [the university in Texas] or postdoc. That industry job was still in process.

"And this is what time?" I asked for clarification. "It was May," she sighed. "You were supposed to start in January, right?" I counted the months in my head. "Exactly!" she exclaimed, reacting to my surprise. At this point, five months had passed since her intended start date as Ida continued in an unpaid position to maintain visa status while she waited for the outcome of other opportunities. She had been living with the urgency to begin a formal job for nearly half a year and facing the ambiguity of not knowing when or if she would receive an answer that could determine where she would be in the near future. Such a condition demonstrates the overlap between urgency and ambiguity through these experiences.

Still, Ida wanted to know what was going to happen to the job she had secured in New York. She continued, detailing her thoughts at that time:

> I was like, okay, since they're not kicking me out from that place or waitlist or whatever they have on the job, I'm gonna just let it sit and see what happens. I was really curious to know if I'm gonna get that clearance check or not for whatever export license.

As the above indicates, Ida had already recognized the unlikelihood of beginning her industry job on the East Coast, even as she was curious to learn the outcome. The ambiguity of not knowing when or whether the job would come through was too much for her. The urgency of finding a position thus caused her to consider other options. So, she set her sights on the exciting new prospect of a postdoc in biology education. However, here, Ida encountered another obstacle:

> Yeah, university HR is also pretty slow when processing the postdoc applications. Plus, they have new rules that you have to actually do like a formal interview that has a third person [and] also has a committee member involved for the postdoc in the interview. My advisor didn't know how to do it, but it was going slow. So, I was working…

At this point in the story, I asked, "You were *volunteering* through all of this?" Ida responded, "Exactly." She paused before adding, "Like you can't call it *volunteering* because OPT doesn't allow you to do [volunteer work]. You have to do 'work.'" Ida emphasized that despite "working, she was not getting paid." Rather, she was doing so simply to maintain compliance with the OPT requirements to be formally employed (not volunteering).

It was not until July when Ida finally learned she would soon be able to begin the biology postdoc position. She explained her thoughts:

I was so excited. I really liked it. I was ready to just go start it. But it officially started

mid-August. But I knew in July that I'm going to get it. I knew that it's just a formality

that I have to wait for. And then I can start my job in a few weeks. So, I knew I've got

this. I knew that I had it.

The tone of Ida's voice warmed as she sighed and looked out the window. At that moment, I felt

like her story of waiting to begin her OPT position was coming to an end. She had outlined the

application process for three different jobs over the period of seven months and had shared the

difficulties of securing her current position. She continued where we left off: "So it was July.

That is [when] the company called me. 'Hey! You got your export license! Do you want to

start?'"

But I feel like this [the NYC job] doesn't feel right anymore. It's just…I feel like that

company has been playing with me. And then when I ask them, that's the time that I

realized I don't want to go. I told them, "Can you give me two weeks so that I can think

about it?" They're like, "No. By the end of this week." I have been waiting for you seven

to eight months and you cannot give me a week or two weeks to think about it? And they

were like, "no." I think it was Wednesday. And they told me, "you can let us know by

Friday if it's a yes or no."

Ida turned the offer down. Despite her initial excitement over attaining the job in January,

waiting nearly eight months for the required paperwork left Ida ready to pass on that particular

opportunity and instead pursue a position in science education.

Ida's story began with a struggle to align her graduation time with an employment start date. When she received an offer for a position to begin in January, she was thrilled to take the next step and begin her professional life. Yet, complications attaining work authorization with that company forced Ida into an eight-month holding period where she worked unpaid to maintain status while waiting and scrambled to find a viable back-up plan. The urgency to maintain status during this transition caused Ida to take on unpaid work. The ambiguity of navigating the study to work transition as an international student caused her to be in suspended wait while the company processed additional paperwork due to her international status. Further compounding this ambiguity was that, during the eight months of waiting, Ida did not know the duration or outcome of the process. As she waited for the results of her investment, she continued to explore options elsewhere. Eventually, Ida overcame these challenges by pursuing her passion in biology education and landing a postdoc in her department. Even then, challenges with hiring and her advisors understanding of the hiring process caused her start date to be delayed until August, a full eight months after she had planned to start employment.

From Study to Work: Concluding remarks

In this chapter, I explored how the transition from study to work was marked by urgency and ambiguity for the international graduates participating in this study. Their international status dictated that the transition from school to work must happen in accordance with the guidelines and timelines laid out by the U.S. government for OPT. As such, the urgency arose from knowing graduates must make the transition from study to work within these parameters. Failure to do so implicates a status violation and threatens a graduate's legal status in the country. Ambiguity arose when the players in the process operated from varying degrees of knowledge about the policy. Graduates were thus left to guess what others might or might not know about

OPT and whether employers would be willing to hire them given that their international status complicates the hiring process.

Each of the graduates who shared their stories with me had to develop strategies for attaining employment, as well as strategies for dealing with the added vulnerability and stress of the urgency and ambiguity in their study to work transitions. Not knowing which employers would be willing to hire them, the graduates responded by applying "everywhere," as Gabe and Dhara told me directly, hoping this bulk approach would produce results. Others, like Emma and Xiaoyi, relied on connections made during their studies at MRU to find their position. As they advanced through the hiring process, they continued to have to tiptoe around conversations regarding visa status as they endeavored to secure employment. David opted not to disclose his international status until he had a chance to "sell [him]self." Conversely, Dhara recounted needing to "go around explaining" to employers during career fairs what it would entail to hire her. She was still explaining these procedures during the job interview wherein she was offered a position.

In sum, needing to make the transition from study to work within the parameters and timeline outlined by the state added extra pressure to a stressful life stage. The international graduates, all of whom had encountered visa-related regulations throughout their time as students, were aware of this urgency and acted in a timely manner to respond to it by applying on time (90 days in advance) for their OPT extensions, even though they did not yet have jobs lined up. Each participant fully felt this pressure in the job search. Yet, as is often the case in such situations, overcoming the urgency to find a job was not something graduates could do solely on their own. Urgency demands a response, a reaction. As the narratives in this chapter demonstrate, participants responded by exhausting their individual efforts and continually adjusting their

96

approach based on the obstacles they encountered. Under the constant press of needing to make the transition the "right way" and "in time," participants continuously struggled to maintain status and composure.

In addition to the urgency they felt to quickly find a job, they were also driven in different directions by the ambiguity of the job search, as they could not anticipate who would know what about hiring international graduates. This led to several layers of ambiguity. It is not simply that a graduate and (would-be) employer might have different interpretations of the OPT policy—it is also that the graduate is often incapable of surmising what a given employer's understanding or view of the policy might be. For instance, even as the graduates understood the urgency of making the study to work transition within OPT's dictated parameters and timeline, they could not be sure what others knew and what would be up to them to explain. On the threshold of a major life transition, inconsistencies regarding how (or whether) OPT policies were understood by those around them caused considerable discomfort. This uncertainty was compounded with the realization that employers can legally choose not to hire a student because of their international status. This ambiguity left graduates in a dilemma: how should they inform employers about their international status and the additional procedures required to hire them? When is the best time to do so?

The ambiguities in this transition might be best metaphorically represented by a poker game. It is as if graduates sit down at a table for the first time with players they do not know in a timed tournament. They attempt to learn the rules (visa statuses) while not knowing if the other players (school and employer) have bothered to learn the rules or whether they will be poker masters, capable of bluffing and bending the game to their advantage. International graduates do their best to learn the game (i.e., the "certain way to apply"), seeking advice from other players

97

like international peers navigating their own games. Even though, as Casey said, "it was all very hectic to try and be done and try and figure it out," they become skillful at the game. They develop their own "poker faces," like David, who held his cards close, opting not to tell employers until he had a chance to sell himself for fear he might tip his hand. They talk up their hand, too, like Dhara explaining to employers the details of the visa policies and advocating for her own employment rights. They split their bets between multiple hands while playing multiple tables (employment options), hoping the lucky one will come along. Gabe told me he had bets on "more than five hundred" tables ("companies"). As they decide whether to fold, check, or raise, graduates had to keep the other players (employers) in the game to proceed. If they folded, it was over. As the timer runs out on the tournament, they know they are going to have to pick their final hand to go all in.

The urgency and ambiguity international graduates experienced as they transitioned from study to work often culminated in a sense of relief when they were finally able to begin their employment. Emma, for example, exclaimed she was able "to sleep again." Yet, as I explore in the next chapter, this relief is short lived because the dynamics between graduates and the spaces they navigate continued to be permeated with urgency and ambiguity. Remember, OPT is temporary. With only a total of three years of eligibility (for STEM), graduates must consider "what happens next" even as they begin OPT. This consideration of the next step casts another shadow of uncertainty on their present.

Chapter Five: Securing Futures Beyond OPT: Enduring Impermanence and Unsettledness

The previous chapter explored the stories of David, Xiaoyi, Ida, Emma, and Dhara as they navigated an urgent and ambiguous transition from study to work under OPT and eventually secured employment in the United States. This chapter continues their narratives through an exploration of how the OPT policy contoured their experiences, especially as they considered their futures beyond OPT. Because I spoke with graduates currently enrolled on OPT, I was able to explore current mobility considerations as well as experiences of initially transitioning to work, the focus of the previous chapter. When we spoke in the fall of 2019, each participant was considering the options available for remaining in the country after OPT expired. Yet, just as OPT guidelines and timelines caused them to feel a sense of urgency and ambiguity in their study to work transitions, the restrictions of OPT and how the policy is situated within the broader U.S. immigration system created additional pressures for participants as they looked ahead to their futures.

As previously discussed, being on OPT is an experience of spatial and temporal betweenness because OPT is temporary. Even including the two-year STEM extension, this program only affords applicants a total of three years to work after graduating from a U.S. HEI. After these three years, they must leave the country or switch to another visa status. For the graduates I interviewed, "what comes next*"* was on their mind from the moment they began their OPT employment, if not before. They were keenly aware of the time limit and made their decisions in anticipation of future possibilities. Knowing OPT would end—and with it their ability to legally remain in the country—participants had to think ahead to their next steps. Coinciding with the *what comes next* question was a similar question: *stay or go?*

Graduates especially grappled with whether they would try to remain in the United States, return home, or move to a third country. For them, "staying" required them to consider

the conditions (visas) that would enable them to maintain legal status in the country. As graduates counted down the days until their OPT time elapsed, they knew the F-1 visa that allowed them to come to the United States for study and remain for work would expire and they would need to secure a new status. The type of new status depends on how graduates envision their next steps. For example, if graduates desired to remain in the United States to pursue further study, they needed to attain acceptance into another program of study and have their F-1 visa renewed and transferred to the new school. If they hoped to remain in their current jobs or otherwise remain in the country to pursue continued employment, they needed to secure a work visa.

The work visa they sought for securing their next step beyond employment was the H-1B, which allows employers to temporarily employ foreign workers in specialty fields. Unlike OPT, which is initiated by the student and does not require employer sponsorship beyond the willingness to extend employment, the H-1B process begins when employers file the requisite paperwork with the Department of Labor. Employers must demonstrate: (1) that the position cannot be filled by an American citizen or U.S. permanent resident; (2) that the "foreign worker" possesses the necessary skills and knowledge to perform the job; and (3) that their salary will be consistent with the prevailing wage for that occupation and region. In addition to filing the requisite paperwork, employers must often shell out fees for filing and document preparation of more than $5,000. The graduates in my study who hoped to remain in their jobs or otherwise stay in the country for employment thus needed to find employers who were willing to sponsor them and go through the H-1B employment process.

Even in cases where graduates were able to find an employer who was willing to sponsor them, the final step to securing an H-1B requires that they literally "win the lottery." The number

of H-1B visas issued each year for industry jobs is capped at 65,000 (plus an additional 20,000 for graduates with a U.S. master's or doctoral degree). In the last five years, the number of H1-B applicants has neared and even surpassed 200,000. From the total pool of applicants, 65,000 are randomly selected by a computer algorithm to receive the visa. In other words, H-1B applicants have around a *one in three* chance of their petition being selected in the lottery, or a slightly higher chance if they have an advanced degree. "Institutions of higher education" are exempt from the H1-B cap.

As those taking part in STEM OPT are allowed only three years before they must consider other visa options, these policies create a space of temporal and spatial betweenness. The temporal betweenness is often felt as a sense of *impermanence*, of being perpetually temporary. Recall that OPT is only available for up to three years, at the end of which graduates must decide to stay or go. If graduates hope to stay in the United States beyond OPT, regardless if their next step is study or work, their status will still be temporary as both the F-1 and H-1B are *temporary, non-immigration intent* visa categories. As such, graduates seeking to stay can only plan their futures as far ahead as their current visa status, while identifying and executing what they need to do to secure their next status. Of this impermanence, Emma expounded, "basically, until you're a U.S. citizen, everything is temporary, *everything* is temporary." As the following narratives demonstrate, this constant consideration of "what comes next" largely determined how participants experienced their time on OPT. David, for example, described this impermanence as "living on loaned time" where "everything" is "on a timer." Such a feeling echoes the urgency to make the study to work transition described in the previous chapter, thereby demonstrating the prominence of the temporal dimension in the OPT experience.

The spatial betweenness of OPT manifests in the experience of *being unsettled* in the United States, yet gaining experience and skills specifically relevant to the U.S. context. By attaining a degree from a U.S. HEI and work experience under a U.S. employer, graduates accrue multiple forms of human capital beneficial to the state. Yet, citizenship rights—or any type of permanence—is still not fully within their reach. The policies that enable student graduates' cross-border mobility are exactly what cause them to experience this unsettledness. "You want to see some sense of security, right? That you are allowed to stay here. You won't just be asked to leave," Dhara opined. Indeed, the OPT policy allows graduates to be here but, notably, without a sense of *fully* being here. Jian pointed to this problem as she considered her future in light of the unsettledness: "It was miserable. It is all because of my visa. If I were an American, if I had citizenship..." In other words, because of the OPT policy, not only are graduates' experiences influenced by a truncated temporal dimension (knowing that time is going to run out), but they are also incapable of being in the U.S. as "freely" as the domestic peers they have studied and worked alongside.

As the narratives in this chapter highlight, it is difficult for graduates on OPT to move between employers. Moreover, as their status is tied to their employer, graduates are keenly aware of the need to maintain a positive relationship with their supervisors, even as they report unfair treatment or discrimination due to their international status. Emma noted, "I am still getting jerked around and it's really a hard point of being: Am I getting screwed because I'm foreign? Or are you just arseholes? And that's been really tough. Like, you're kind of, like, you're powerless." As Emma's experience indicates, such conditions require graduates to endure the poker-like ambiguity implicated in the employer-employee relationship as contoured by immigration policy, demonstrating the continued salience of the ambiguity of these experiences.

In considering their future options, particularly in light of what is possible if they desired to stay in the United States, the participants in this study grappled with what it might be like to "go home." During our interviews, all participants expressed that they were exploring options to stay. Nevertheless, given the uncertain conditions for remaining in the country in the medium (two to five years) or long term (over five years), some gave considerable thought to what returning to their home country would mean for them. They reflected on themselves and their experiences in the United States and wondered how they would transition back to living in their home countries. As their education and work experiences were grounded in U.S. contexts, they thought about how they would fit in with different work cultures and life back home. Throughout this, they articulated an unsettled sense of betweenness—of not fully fitting here (the United States) or there (home). Jian's reflection on her cultural identity specifically captures this unsettled betweenness:

> That is what is really frustrating for me: I don't know whether I want to live in China or stay here. Because inside myself I am Chinese. But there [are] lots of different kinds of cultures mixed in me: American culture and Chinese culture. And I am not *completely* Chinese or *completely* American.

In the above passage, Jian reflected on her experience given her transnational background and was still unsure of its implications on her identity.

It is important to understand the aforementioned temporal and spatial betweenness as interrelated and sharing the same origin: OPT, a *temporary* visa extension that permits "foreign students" to remain in the United States. The impermanence participants felt looking toward their futures was directly tied to the unsettled feelings they articulated about *being* in the United States on a visa that limits their present and future activities in the country. In short, their *being here* is

temporary; the timer is counting down their remaining *time* in this *space*. For this reason, it is a challenge to disentangle the temporal and spatial betweenness experienced by these graduates which themselves influence the interpersonal encounters in these transitions. Moreover, given the time constraints and the complex immigration processes graduates must navigate at this juncture, the *urgency* and *ambiguity* discussed in the previous chapter continued to permeate their experiences as they faced the *unsettledness* and *impermanence* of their uncertain futures beyond OPT.

In the remainder of this chapter, I continue the narratives of Xiaoyi, Emma, Ida, Dhara, and David to highlight the ways impermanence and unsettledness manifested in their experiences. In doing so, I explore how the pressures and uncertainties implicated by the policy shaped graduates' thinking about their future careers, as well as how it shaped their daily lives and encounters.

Xiaoyi

In Chapter Five, we learned Xiaoyi took a job at a startup in California upon graduation after exhausting nearly all of her OPT unemployment days and turning down a position in Michigan that would have started too late. She explained the startup was run by a Stanford professor and that the "company was very academic to be honest. So, the workplace was not very difficult to get used to." As the primary designer for the startup's planned online product, Xiaoyi appreciated that she was "the one that's necessary in this company." Yet, recognizing that she would have limited time on OPT, she began to consider her next steps. I asked her what informed her considerations:

> For international students, there are a lot of things to think about. First of all is your
>
> visa. . . . If you want to stay in the U.S., how can you get a visa [to] continue to work

here? This second one is like, personally for my career, because the starting years or

starting several years for career are very important. So, what should I do to keep myself

moving forward?

Here, her thoughts were informed first and foremost by how visa policies contoured her future

possibilities, while her personal and professional goals came secondary. As she identified her

next steps, Xiaoyi was not only conscious of how her career moves would build upon her

skillset, but whether the position could provide her with the necessary visa to remain.

Initially utilizing her skills in design, she soon became frustrated when her boss began to

ask her to take on more administrative responsibilities outside of her assigned duties. The startup

had pivoted away from its original project and was moving in a different direction, which caused

Xiaoyi to question her job security. Pushing back against her boss' requests, she later learned the

consequences for her future visa status:

I was the only one who didn't get the H-1B sponsorship in my company this year.

Because he told the VC [Venture Capitalist] that we don't have a lot of design work in

our current product, although I did a lot in the past product, but they are not being used

anymore. So, it was a very, very bad experience because he [boss] didn't tell me. He told

me that "we only have two persons (who) can get H-1B and you are a STEM OPT

student, so you still have two chances to get a sponsor. So, we want to prioritize the

people that work longer in our company." But actually, they sponsored all the people

except for me. So, I was told of this case by another top guy, our friend, an engineer, and

he told me about this and said that maybe you should think about changing a job.

As this story indicates, Xiaoyi's boss used the justification that, because she still had OPT

student status, he did not need to extend an H-1B visa sponsorship. He was thus seemingly

indifferent to Xiaoyi's impermanence and caused her to be unsettled in not knowing her next steps.

She continued to explain her frustrations with how her employer had handled the H1-B issue.

You know, it is the employer that gets to decide whether or not to extend an H-1B sponsorship. Yeah, but I think at least you should tell me; you should not lie to me. And actually, in the spring, especially in March and February, a lot of companies are recruiting people. And if you think that my job is not necessary for you anymore, then you should tell me so I can get ready for finding another job. But still, he doesn't tell me. And another case that I am not very comfortable with the company was, as I told you before. I know nothing about the employment policy in the U.S. At that time, I found I was still on an internship; I was still an intern. I didn't know whether it was legal or not. But I trusted [them]. He transferred other employees into full-time employees by raising their salaries, except for me. And I didn't get a W-2. I only got a 1099, I think. And to get health insurance, I bought it from the school. But he provided health insurance to other employees. So why don't you tell me? Yeah, that was a really bad experience in the last company. But luckily, I got rid of it. Finally.

Xiaoyi's frustrations about her employer's unwillingness to provide conditions commensurate to her colleagues or a sense of security regarding her future caused her to search for another position and eventually leave her job. Not only was her employer unwilling to communicate clearly with her regarding her next steps, he also placed her in a precarious position regarding her current and future legal status in the country. Encountering the employer's unwillingness to

directly address Xiaoyi's visa concerns amplified the urgency and ambiguity she experienced and left her feeling impermanent and unsettled.

Initially intent on giving up and returning home, Xiaoyi's boyfriend supported her and encouraged her to persevere, referring her to contacts at companies in the Bay Area. When we spoke in the fall of 2019, she had finished another frantic job search and was in the process of negotiating her contract with a new employer, who expressed willingness to apply for her H-1B in the next cycle. Xiaoyi was confused, however, how the salary requirements for getting H-1B might complicate her negotiations. H-1B requires that employers pay H-1B workers a salary commensurate with the *prevailing wage* in the field and geographic area. Because the contract offered to her included a salary about $10,000 below the prevailing wage, Xiaoyi explained that it "doesn't meet the requirement of the sponsor line." Conscious of not wanting to "to face the same problem again and again" regarding whether she could get H-1B, Xioayi felt considerable discomfort negotiating with her employer. She detested the poker-like ambiguity.

Outside of these immediate concerns regarding the H-1B, Xiaoyi spoke about her professional and personal aspirations in the future.

> To be honest, I think the only thing that I should consider for my career is to gain more experience and maybe better work, better projects to enhance my portfolio. . . . In the long term, there are some things, other things to consider: maybe my family, because as you know…I am the only child in my family. So, I have to think for a long term, should I stay in the U.S., stay abroad for a long time or not? Yeah, I think that is the problem. Maybe this is the main thing that I consider.

According to her story, Xiaoyi expressed doubt and uncertainty about what she wants to do in the future. For her, the stay or go decision is something that she lives daily as she considers her

professional and personal future. It is a decision that constantly (re)shapes her desires and aspirations in terms of what is possible under the employment and visa reality.

Despite attaining internship experience in China before coming to the U.S. and in between her years of study for her master's degree, Xiaoyi recognized that returning home to find work would not be a simple. "The process is also very competitive because there are more and more students studying abroad. To be honest, there are more and more students going back to China [than] years before," she noted. Thus, despite feeling unsettled in the United States, imagining a possible future upon returning home also involved a level of uncertainty.

Xiaoyi's planning for the next steps after OPT were derailed early when she learned her employer was not willing to file an H-1B application on her behalf. Frustrated by her employer's handling of the issue, she sought another position that would provide her a greater sense of security. When we talked, Xiaoyi was excited to start the new position but was wary that the new employer, despite articulating their willingness to sponsor her for an H-1B, had not offered her a salary commensurate with the prevailing wage in the field, an issue that could impede her H-1B application. As Xiaoyi continues to contend with the medium-term challenge of securing a work visa, she was already thinking ahead to longer term question of *stay or go*, admitting that the question is an ongoing consideration for her.

Emma

Working in Detroit at a small family-owned company as an engineer, Emma sincerely liked her job and those with whom she worked. In fact, her supervisor and a group of colleagues happened to come into the same Thai noodle restaurant where we were conducting our interview, interrupting with a few inside jokes, laughs, and office banter. Despite this, Emma reported feeling frustrated about how she was being compensated for her work. After several months,

Emma moved into a new role at the company with a more advanced title and responsibilities. She felt comfortable with the work but also felt unsettled because of how she was being compensated. She explained:

> What's really hard for me sometimes is not just wanting to blow a fuse at somebody. I mean I make reasonable money, but it's like you're still getting jerked around and it's really a hard point of being: Am I getting screwed because I'm foreign? Or are you just arseholes? And that's been really tough. Like, you're kind of, like, you're powerless.

After articulating these frustrations, Emma went on to explain their root:

> I think that [with] STEM OPT, you've got the same kind of restrictions that come with like an H-1[B], like employers and all that kind of stuff. But you don't have the same kind of protections that are offered to gauge…wages and treatment and conditions. And sure, you can report your employer, but that's just going to get you fired.

Here, Emma expressed feeling trapped because STEM OPT essentially connects graduates to employers in ways that make it hard for graduates to advocate for themselves. She needed to maintain her job to maintain status and stay in the country, but she also (understandably) chaffed at being treated inequitably.

Emma furthermore shared how some of the other employees in her department were getting paid "somewhere between 15 and 30 grand more a year" than her. She remarked:

> It's hard because you don't have the labor protections that like H-1B does. Like, if you are on an H-1B and your employer is paying you less than your equivalent, it's incredibly strict. F1, there's no real protections… It's not enforceable to the same degree as H-1B. So that's definitely…it's a shitty place to be. . . . Is it because I'm foreign and I don't have the labor protection? You know, and it's, like, okay, do I have my Department of

Labor friends look at this? Ask if there is a leg to stand on. That's okay. I also don't want to go down, like, the lawsuit route with my company. I do like the people I work with. I do, you know, to [the] most degree, enjoy my job. And it's, like...I just wish you'd pay me...what I am worth.

In the above passage, Emma described being put in a position to be taken advantage of because STEM OPT does not have the same type of labor protections as H-1B that guarantee commensurate pay. These frustrations further led her to consider taking actions like applying for other jobs or consulting with an attorney or her "Department of Labor friends." She knew, however, that these actions were likely to draw unwanted attention and potentially result in her losing her job and, with it, her legal right to remain the country.

When we spoke during our interview in October 2019, Emma was in the midst of wading through the salary challenges presented above. She also reported her uncertainty regarding what the next several years after OPT would hold for her:

I want to stay. But it's, like, we don't have options. My STEM OPT is up next July. Like, you don't have that long. And it's like I don't really want to go back to university just to burn another year now. I'm not going back just to burn another year. Like, yes, I want to get to my master's, but it's expensive. So, there's all that kind of stuff in the U.S.A. That kind of can of worms.

Here, Emma spoke about feeling a continued sense of impermanence in looking ahead to when her time on OPT would expire. With her STEM extension set to end in less than a year, Emma considered enrolling in a master's program to continue her education and return to student status to remain in the country. Yet, she saw this as an expensive and time-consuming move.

As Emma reported not wanting to pursue further study, I was cautious in broaching the question of whether the company would be willing to apply for an H-1B on her behalf. Emma sighed and noted:

> Yeah, they offered. And I was like, you know, because, I'm not [sigh], I can't on a mental...the mental health front. I can't put myself through that for the H-1B... Like, if you get denied, right? "Get your ass out of the U.S.!" So, I could not do that to myself. It is a fucking lottery. It is a lottery with a one third chance of getting it. It's not even a coin flip. It's like a dice. It is literally a dice roll. Also, you know, I don't really want to be super tied to the employer.

Above, Emma described the uncertainty of submitting to the H-1B lottery with no guarantee of being selected. This, combined with the fact she would be bound to her employer for an additional three years, deterred her from wanting to take that next step. In general, she recognized it was a high stakes move with a less than desirable payoff.

Yet, Emma also recognized that, unlike many other international graduates in her circumstances, she had another option. When we talked in October, Emma was in the process of planning her wedding to an American citizen, a classmate she had dated for four years. She knew that marrying a citizen would help her side-step employment-based immigration processes. Despite having this other option, Emma had grown disillusioned with the U.S. immigration system:

> And I heard someone say, "if you're here legally, you're fine." I'm like, "No!" I'm not really a violent person, but I want to punch you in the face. You don't get it. You can be here legally one day and they can decide that your visa status is no longer a legal reason to be here the next day. . . . Basically, until you're a U.S. citizen, everything is temporary,

everything is temporary. . . . So, I'm definitely looking forward to a day when I don't

have to deal with immigration anymore. I think it's just U.S. immigration. I can deal with

doing some other country's immigration, just U.S. immigration though. It's pretty bad.

Emma continued to discuss how, coming from New Zealand, she felt frustrated by the U.S.

immigration system, which had led her to feel impermanent and unsettled. For this reason, she

reported that, even though her marriage would provide her a mechanism to remain in the United

States, she and her fiancé were considering moving to New Zealand, which has a points-based

immigration system. There, she felt she and her partner would have a greater sense of

permanence and might feel more settled.

Emma's story details how recent graduates employed under OPT face challenges directly

related to how the policy shapes the relationship between employer and employee. Emma felt

stuck, reflecting on her circumstances and asking, "is it because I am foreign?" These

experiences, combined with her growing understanding of and frustrations with U.S.

immigration policy led Emma to question what she wanted to do in her future, weighing whether

she should stay or go. Recognizing that entering the H-1B lottery would put too much strain on

her mental health, she took comfort in knowing her marriage to a U.S. citizen would provide her

with a way to overcome the impermanence. Nevertheless, she continued to go back and forth on

whether she would stay or go. When I checked in with Emma several months after our interview,

she informed me that "my husband and I just landed in Auckland (NZ) this morning." She had

moved home.

Ida

In Chapter Five, we learned how Ida, the biology PhD from Iran, navigated a turbulent

transition from study to work. Recall that she was detoured by the "export permit" process of an

East Coast tech company before beginning a position in biology education on OPT. Unlike the other graduates in my study, Ida also had an early, frustrating, encounter with the H-1B. This encounter particularly demonstrates the consequences of the concern Emma articulated regarding being tied to an employer.

After finishing her story about beginning her postdoc in biology education (see Chapter Five), Ida circled back to her experience with the high-tech company in New York. In April of 2018, four months after she was meant to begin the position (and when she was working unpaid to maintain status), she was contacted by the attorney of the company: "Hey, we know that you haven't started working here, but you're officially our employee. We are going to apply for your H-1B." Ida shared her thoughts on the matter:

> I didn't know the rules. I was like, "OK. That's great. I'm going to get an H-1B! Why
> not?" Like H-1B has this lottery thing that I might not even get it. They told me that,
> "yeah, the company is doing that." I was like, "Okay, let's do it!" And, like, three weeks
> later, I was notified that I got it.

At that time, Ida knew securing an H-1B would be challenging due to the lottery and felt it was worth a chance to help secure her next steps even if she was not familiar with the rules.

Upon learning the H-1B would not become active until October, however, Ida began to have second thoughts. Recall that by April, she had still not begun working at this company because the export permit had yet to come through and she could not be certain it would come through before the H-1B became active. When she expressed these concerns to her company, they replied with, "we will figure it out." Unsatisfied with this answer, Ida explained what was at stake:

I hadn't started working and I didn't want the H-1B if I was unemployed. So, the tricky part was that if I had this H-1B going and then my job had to start in October, I was out of status. My OPT was also gone. . . . And then I had to actually have 45 days before I had to leave the country, basically. Yeah [sigh]. So, it was really tricky. I didn't know about these things until I went through all of these. I figured, okay, this is weird; complicated. Nobody tells you all these things.

As the above demonstrates, Ida was unable to ascertain when or if she would be able to begin the job and was thus unwilling to undergo more uncertainty. As the company had successfully applied for her work visa, she was set to transfer statuses from OPT to H1-B in October. However, several months into waiting for the export permit, Ida was worried she would not be able to start the job at all, which would invalidate her OPT and her H-1B would not be activated. This would put her out of status and force her to leave the country. Facing that ambiguous unsettledness, Ida requested that the employer begin the process of withdrawing her H-1B petition. "As soon as I got it, I was like, 'okay, let's withdraw it. I don't want it,' because I was like, 'it's just not clear what's going on here.'" Facing the urgency of beginning a job quickly but also in a way that would not violate her status, Ida determined that the unsettling ambiguity of whether or not she would eventually be able to begin the H-1B was to much for her to bear.

Yet, Ida's wait and uncertainty did not end there. As the H-1B is employer sponsored, the process for withdrawing the visa petition is also the responsibility of the employer. Although her company "started the process of withdrawal way before [she] officially got the H-1B," several months passed and the situation was still unresolved.

I was talking to the attorney of this company in fighting with them. It was getting really complicated because like, "you guys are responsible for this. You have to figure it out.

You have to get it right here." [she said to the company], "We have sent the withdrawal.

We don't know" [they responded].

Ida knew that, because the company had started the petition, they were "responsible" for her status and resolving the issue of withdrawal, even if they were not being proactive or responsive throughout the withdrawal process.

As time passed without resolution, Ida grew increasingly frustrated. She knew that, if she couldn't withdraw the H-1B, her legal status would be tied to the company. Yet, if she couldn't begin work at the company because of a pending "export permit," she would be out of status and forced to leave. She elaborated:

I didn't hear anything back. Oh, my God. It was July. I was about to start the job here [biology education postdoc]. I had two months until October to figure out what I'm going to do with this H-1B that I don't need, and nobody was responding. So that's why I started talking to the senator. . . . So, the OPT was going to disappear. But then I started talking to Senator Stabenow.

As is evident in her story, Ida's patience was growing thin. Yet, I was admittedly taken aback when I heard her say the senator's name.

I asked her how she came to contact the senator. Ida told me that, when she was initially applying for her student visa and encountering some problems, she had sent letters to Michigan senators. Although she did not hear back when she contacted the senators the first time, when she reached out with the H-1B concern, she received a response:

But then, this time, I had paid my taxes to Michigan for years. . . . So, they were like, yeah, definitely, we can help you. Just give us some information. A person was assigned to me…she was super helpful. Oh, my God. She was so fast. She got a hold of the person

from USCIS in California, found my stuff, and they found the withdrawal letters sitting in

that storage unit! Not even been through yet! They didn't even know that letter existed!

They didn't attach that letter to my file. But I didn't know!

With the help of the senator's office, Ida learned where her paperwork was getting held up. "It

happened in two weeks," she marveled, "I had been waiting for months!" After months of

unsettledness waiting, Ida was relieved to have the process begin to be resolved with the

assistance of the senator's office.

The representative from the senator's office also informed Ida she would need an

"official letter from that company letting us have access to [her] file." It would take Ida another

"three to four weeks" to find someone in the company that could sign the letter and allow the

senator's office access. She told me about the tight timeline, "So, it was late August or early

September, a month before October almost, that I could finally officially withdraw my H-1B…

But I was lucky. I was really lucky that the senator helped me. Otherwise, I'd... Who knows!"

By September, Ida had already begun working on OPT as a postdoc in biology education after

turning down the offer from the NYC-based tech company earlier that summer. If she had not

been able to successfully withdraw her H-1B visa before its official start time, her OPT would

have been invalidated. As a result, she would have been out of status and forced to leave the

country. As she cannot possess two visas simultaneously (e.g., the F-1 OPT student visa

extension and the H-1B work visa), the H1-B would need to be withdrawn or it would supersede

Ida's current visa status. As she had already turned down the NYC position, she would have no

way of satisfying the requirements of the H-1B visa and would have to forfeit legal status in the

United States. Although participants in this study looked toward the H-1B as the next step for

staying in their jobs or otherwise remaining in the United States to work, it nearly caused Ida to lose status and have to leave the country.

As her narrative detailed in Chapter Five, Ida eventually began a postdoc position in biology education at MRU. Now in that position, she explained she had begun exploring future options:

> I was talking to the biology department here that, "hey, can I apply for an H visa? Like an academic H visa so that if my OPT disappears, I can have it?" They are like, "No. Since three years ago, we decided not to issue anyone an H-1 because none of the faculty this year would like to do that. You can be on a J, you know."

Wanting to maintain status and hoping to avoid a similar disaster as that which had occurred with the employer in New York, Ida set about exploring her visa options after OPT. She had hoped to secure an H visa through the university but was disappointed to learn that they were suggesting a J (cultural and educational exchange) visa instead. "They were telling me that you can be on J. I was like, 'I cannot be on J. I've been living here. I've been on OPT. I cannot go on J. They can't understand it." Given Ida's past status as an F-1 student who then went to work on OPT, she would be ineligible for transferring the cultural exchange J visa. The fact that Ida's employer was incapable of determining an appropriate visa is indicative of the continued ambiguity graduates navigate through their relational encounters in these in-between experiences.

During our interview, Ida was still unsure as to what her next steps would be. From her perspective, if she wanted to remain in the United States, she had limited options. "Yeah. So my option was only H through the university or [sigh] I don't have any other options. If my OPT is gonna, I don't know, get withdrawn or something, or I get out of status, I don't know…" she trailed off. I asked how she was dealing with all of this uncertainty. She explained that,

"Emotionally, it was my boyfriend here and my brother here." Yet even with this support, Ida explained the difficulty of being separated from her family during this challenging time:

> Yeah [sigh]. But my parents cannot visit. That's a sad part. Only time they came was 2014, before the new president. Before the election. And after the election, they got rejected because this travel ban would not let them come to me. So, I haven't seen them for five years. So, the whole thing was [sigh]… I couldn't even explain to them what's going on because they don't understand. Even my friends here, they don't understand the whole complicated situation. [They ask] "Are you on a visa?" [I say], "Yes, I am." [Then they say], "So, why can't you still work?" [I tell them], "Because I have to withdraw my H-1B." [They then ask], "What is an H-1B?" So, you can't even explain it to people.

As the above shows, dealing with the impermanence and ambiguity of her situation was not necessarily alleviated by having a supportive community. Ida articulated her frustrations about nobody being able to understand the complexity of her situation, whether it be her Iranian parents or American professors, peers, coworkers, and friends.

At the time of our interview, Ida was still grappling with the question of "what comes next." Her story demonstrates that, although she was able to secure an H-1B, the next step after OPT for many graduates seeking settlement and a sense of permanence, moving across statuses is not so simple. To continue OPT through her biology education postdoc, Ida had to request that the employer who sponsored her H-1B withdraw her visa application. When the withdrawal did not progress smoothly and risked Ida's legal status in the country, she had to call upon the assistance of a Michigan senator's office, through whose help she was able to get the visa formally withdrawn. Although she is now continuing her work in science education and hoping

to overcome the feelings of impermanence and unsettledness, Ida remains uncertain of what comes next.

Dhara

      As we learned in Chapter Five, Dhara had begun thinking ahead to working in the country post-graduation before she even applied for master's programs in the United States. During our interview, she explained that she enjoyed her position in the small family-owned construction company in Detroit. "It has been awesome. The culture, I really like it, every little bit. We have holiday parties. For Halloween, we have a decorating contest…I love it"

      When the conversation turned to what she would do after OPT, Dhara recalled conversations with her parents.

> Because the conversion of Indian currency for dollars is very high, my parents had to take a student loan. So, me getting a job here was important so that I could pay that back. So, before I came here, I guess they were still hopeful that I would go back home. But they thought I would take some years to get experience and then decide to go back.

I asked her what she was thinking about doing now. "I am not going back," she stated decidedly. When I asked her why, she answered:

> I mean, you know, if [my parents] let me stay, yeah. So, they are on board now and they say, "if you want to settle down there, that is okay." Now, the issue is I need to get my visa in two years. This year I didn't get it, I did not get picked in the lottery.

During this exchange, Dhara revealed that remaining in the United States to gain work experience and pay off her student loan was an expectation for both her and her parents when she initially set off to study abroad. Yet, after working for a year, Dhara had resolved that she is "not

going back." Despite declaring her intentions to remain in the country, she was also keenly aware of the need to secure a work visa for her next steps and the difficulty ahead.

Dhara had already mentioned her employer's enthusiasm in doing "whatever it takes" to help her secure the appropriate work statuses. She noted that, although her employer applied for her H-1B visa the first year, she "didn't get it," but quickly added, "but, I got two more chances. And I don't want to take the risk, so that's why I must apply for a Canadian visa." Surprised to hear that Dhara was simultaneously in the process of applying for visas both in the United States and Canada, I asked how she decided to pursue these multiple options. She explained:

> So, I guess because I saw a case like my roommate. He went over there because, after three years of OPT and STEM OPT, he wasn't picked in the (H-1B) lottery for three years. And he was working for a very big company, so they sent him to Canada. So that's when I thought yeah, maybe I should just start and apply for that because here (United States), there is just no form of permanent security or anything like that. Just to have a backup option.

Dhara's reasoning here indicated that, although she enjoyed her work and maintained a positive relationship with her employer who was willing to sponsor her work visa, she knew her future was not certain. In other words, she felt unsettled and impermanent. Like her roommate who had been unsuccessful in the H-1B lottery for three consecutive years, Dhara hoped to mitigate some of the uncertainty regarding what comes next by pursuing a "backup option" in Canada. Feeling disempowered by the way OPT positioned her within the U.S. immigration regime, Dhara hoped to escape the impermanence of having only a few years to secure her next step and the unsettledness of not knowing if she would even be able to stay beyond OPT.

Dhara explained that, unlike the United States where work visas are determined by lottery, Canada operates on a points-based immigration system. "It's extremely easy compared to the U.S." She went on to briefly detail her perception of the Canadian immigration system:

You have to have some points. You get a few points for different things. Like, if you are in a certain age group, you get some points. If you studied in Canada, you get a lot of points, which I didn't. But they consider the American degree to count into that. . . . And then your IELTS [English proficiency test] obviously gets you points and then your work experience. …they do ask which skilled trade you fall under. So, apart from that, they don't ask you for much.

Due to the straightforwardness of the Canadian visa application, Dhara viewed Canada as a viable next step, especially compared to the visa lottery system in the United States. She hopes that, if she is unable to secure the H-1B during her final two years on OPT, she will have accrued enough points to advance toward permanent residency in Canada.

Yet, even as she simultaneously pursues these two future plans, Dhara remains keenly aware of the uncertainty and impermanence of both the U.S. and Canadian options:

In 2016, the year that I came here, was the year that Trump got elected and everyone was like, "will you even be able to go?" I was pretty worried. . . . It hasn't been so bad, right? I mean, it is getting worse. That's true, though. The whole H-1 visa process is getting more strict now. They're issuing less. The percentage of approvals has gone down. A lot of people are going to Canada. But the thing is, if they get saturated too, they might stop allowing… I don't know. Will it really pay back some day? In Canada, the population, it's really low. But really, the jobs are less. Finding a job is tough. But they encourage

you to apply for jobs before you go there so you get some points if you have an offer

letter, maybe. I don't know [sigh]. I have two more chances [for H-1B].

As the above indicates, Dhara had thoroughly considered the options available to her in the

United States and Canada and was frustrated by her inability to take full control of her future.

Regardless of her planning, her future was still largely dependent on conditions outside her

control: visa policies.

Seeing her frustration with these policies, I asked Dhara what she would want to happen

if she didn't have to worry about visas. With a sigh and a smile, she exclaimed:

Then I would stay here! Why would I want to relocate to a whole new country? And I've

been here for, like, three years now. So, I'm pretty attached to this country now and my

life has changed so much. So now my views are more American. And when I think about

going back to India, I am, like, "oh, my God. I cannot. I just cannot adjust back to that

lifestyle." So, I guess Canada might be a little like here.

Here, Dhara shows how she had already determined that she would have difficulty adjusting

back to life in India after studying, living, and working in the United States. For her, remaining

in the United States was her first choice with Canada as a secondary alternative. Such an

articulation demonstrates the spatial betweenness and unsettledness that marks these expereinces.

After our aside about a best case scenario devoid of visa concerns, Dhara quickly

returned to how the visas shaped her thinking about her future, which incited feelings of

unsettledness and impermanence in the present. Referring to the H-1B she remarked:

They just think [there is] this set number of visas to give out, and "we will just reject the

remaining few." And it is not even about credibility at all. Like, when they look at the

application, it is not about how credible you are. Anybody could get that. It is random. It

122

is gambling. I would say that, even if it does get picked in the next two years, I wouldn't think of staying here (the U.S.) long term because then there is…[sigh], that's a whole other battle. You can get your H-1 renewed for up to three years. But nowadays, the renewals are also getting cut short. Like, they might give you some number of months, it is all random. And then the route to green card is just super [sigh]... It's almost like you can never get it. It is like X years wait time and [sigh]. If you have to think about starting a family…you want to see some sense of security, right? That you are allowed to stay here. You won't just be asked to leave. So, in the long term, I will still move to Canada. I will work here for a few more years, and then go… I mean, I don't know how employers feel about this. I mean, they train an individual for so long. They have to leave even though they don't want them to.

This statement evidences the significance of a sense of impermanence in driving considerations of her future, particularly as the H-1B process makes her feel unsettled in her ability to stay in the United States. Knowing that OPT and H-1B are both *temporary* policies that afford her only a few years at a time, she is looking toward Canada's points-based permanent residency system as a surer solution to avoid the unsettledness she has been undergoing.

When we think about successful transitions from study to work, Dhara has done everything "right." She attained a job at a family-owned company, where she enjoys her work and has gained considerable experience—all while growing personally and professionally through her time there. Her company is enthusiastic about applying for the H-1B to keep her in her position. Nevertheless, because staying in her position beyond OPT requires that she and her company "gamble" on the visa lottery, "what comes next" for Dhara remained uncertain. Not selected in her first attempt at the lottery, Dhara hoped she would be able to gain the visa in the

123

subsequent two years before her OPT expired. But given the uncertainty of attaining the visa through the lottery, compounded with the H-1B being yet another *temporary* visa, Dhara began looking to another country's points-based immigration system as a viable "backup option." She expressed hope that, by moving to Canada, whether sooner or later, she would be able to overcome the impermanence imposed upon her by the U.S. immigration system and finally feel settled.

David

Before we began our conversation about what comes after OPT, David (the engineering graduate from Venezuela) anticipated my questions. At the beginning of our conversation about searching for jobs, he introduced the topic of the H-1B visa: "Thankfully, I managed to start the job. They didn't have any issues, they actually applied for the H-1B visa this year." I congratulated him on the accomplishment. He responded: "Thank you. I didn't get it." He explained that, because it is "luck based, which is really weird for me. I think we're going to apply next year as well. Hopefully, I get it. I mean, because of the whole STEM OPT, I have three tries." David had failed on his first of three tries but aware that he would have two more while remining on OPT.

David explained that, from the beginning, his employer was aware of his desire to remain and work in the United States and was willing to sponsor his work visa. Furthermore, his direct supervisor similarly came to his position first through OPT and then through H-1B. So, he knew such an option was possible. He told me, however, that many of the other international workers in his company currently on H-1B had entered the lottery and secured their visas after attaining their master's degree:

So, with master's, you know the quota is a tad different. There's no one else in the

company who is in the same situation as me, only having a bachelor's degree. And I

guess I don't know. Sometimes I think, "should I get my master's?" But then again, that's

like… I guess for master's, it is easier to get an assistantship. But then again, you get

used to the pay as an engineer… And because the company pays for some things or some

assistantship for tuition, I was gonna apply to that line while working to keep studying.

But I'm not allowed to because of visa policies. So, I get down to work and pray that I

get the H-1B. It sucks.

Here, David explains that, despite knowing his company was willing to submit the H-1B on his

behalf, he knew his chances of securing the visa as a bachelor's graduate were less than if he

held a master's degree. Although he considered returning to school for graduate studies, he was

put off by the cost and not being able to access company resources to cover tuition. Feeling the

impermanence associated with not knowing what comes next, David focused on his work while

surrendering his future to the visa lottery. He went on to explain how he was feeling as he looked

ahead to an uncertain future:

People here, because they see me working, they just assume that I am on a work visa.

That's not the case at all. Everything I have, like my place, my house, and my friendships

are on a timer. So, if I don't get a visa or anything, what are my options? It is like living

on loaned time, I guess. Like, I'm scared about even on my own, like a more personal

relationship level, right, I am scared of committing to a girl because I do not know if I am

going to be here in two years.

This reflection on his experience provided a literal metaphor for living through impermanence.

Knowing that his future was uncertain made David feel as if his life was "on a timer." The

uncertainty of not knowing or being in control of what would happen next led him to feel as though his present time was borrowed and, as such, he was apprehensive about making decisions that would have implications beyond the immediate term. This quote also demonstrates the entanglement between this impermanence and unsettledness with the urgency and ambiguity discussed in the previous chapter. He was pulled in multiple directions as he oscillated back and forth on what to do in terms of planning for an uncertain and timed future.

After articulating these frustrations, David distinguished between the personal and career implications of OPT on his life:

> Yes, it is tough, especially the personal aspect. Because, I mean, you can argue that [with] my career perspective, you can succeed with the OPT. You are learning right now. You're getting experience also. If you look at what the STEM OPT is trying to do, it is accomplishing that. The whole point of STEM OPT is to give recent graduates practical learning experiences. So, if you look at it that way, it works. It's a great program because I have learned a shit ton. But if you look at the whole life outside of work, I think that's where you have the biggest trouble. I can say it's like living on hold. I always second guess myself, like, "Oh, do I want to do this? Do I want to date this girl? Do I want to get this loan for a mattress or whatever?" I don't know where I'm going to be.

The above demonstrates how, although David felt accomplished in his work and satisfied that he was learning and gaining experience, he still lamented the consequences OPT and other visa policies have had on his personal life, particularly regarding unsettlement and impermanence. He expressed his frustrations over not having access to the types of certainty he would like, "I cannot get a loan for a car because those are 36 months. I don't know where I'm going to be! A

house… No way!" Due to the unsettledness and impermanence permeating the OPT experience, David felt incapable of partaking in these practices of building a home or future.

David told me these concerns were not his only reasons for not wanting to invest time and money now when his future is uncertain. He was specifically worried about how these decisions affect others in his life: "Yeah, the thing is that, for relationships, it is not only unfair for me. It's also [unfair] for the other person, right? You get into like, 'Oh, you're dating me for the green card and all that stuff.'" Although David clarified he had never been told that directly, his friends would sometimes joke, "Oh, you are dating that girl for the green card." These perceptions weighed heavily on David.

Outside of the relationships and decisions David was navigating in the United States, he explained to me that his mind was always on what was happening back home:

> For me, the biggest anxiety is that I'm also the one that provides to my family. A certain percentage of my paycheck goes back to my family. Things back home are pretty horrible. . . . Really, [it's] a hundred percent inflation, which is insane. So, I don't have anywhere to go back home. For me, I'm not going to find a job in a socialist country, right? There's not really engineering jobs at least. So, I cannot go back to my parents, because I'm the one supporting them. Even if I go back, I'm not going to find a job.

Above, David explained that, as a recent graduate, this type of role reversal where he would be the one supporting his parents was not something he had anticipated. But, "a couple months into the work when [I] was getting settled in with an apartment and a car, they [parents] were like, 'Oh, we need some help!'" He shared with me that, "Honestly, I don't mind…it is just that extra weight on my shoulder, supporting my family. I don't know how long that income is

127

going to last." David sighed and took a sip of his drink. I asked him how he dealt with all of this. He swallowed and answered:

> How does it make me feel? Anxious. I guess I try not to think much about it. But it's on my head 24/7. It's, like, what do you do? Like, my parents, it may sound like I'm blaming my parents, but I'm not. It happened to the country. But yeah, everyone I talk to, you know, they have that mattress to fall back on. Sadly, I don't have that. I have my job, that is on a timer. So, there's a ton of anxiety. How do I handle it? I really don't know. I think I'm lucky that I am a happy guy and I don't think much about it.

Although David claimed not to think much about feeling unsettled and impermanent, he also admitted that it is "on [his] head 24/7." As he looked towards the future and contemplated "stay or go," David's deliberations took on a heightened sense of urgency (needing to provide for his family) while facing the ambiguity of not knowing how long his current income might last. Facing these pressures, he was relieved to have fulfilling employment and an employer willing to sponsor his work visa. Yet, he felt tremendous unsettledness knowing that his ability to remain would be determined by the randomness of the visa lottery.

Amidst these frustrations, David still committed himself to his work. He admitted that, "Career-wise, I don't think I can complain. It is, you know, the other side of the coin. It is tough. I guess my plan B would be Canada. Like, how easy it would be to go to Canada." Like Dhara, the impermanence and unsettledness urged him to consider alternatives. Yet, such alternatives would mean leaving his job, something that would not only be a loss to him and his family, but, as David emphasized, also to his employer who was endeavoring to keep him by applying for his H-1B work visa. This led David to reflect again on his future options:

The messed up thing is there's nothing they [the employer] can do either. I mean, they're

doing it by applying. But, what else can they do, right? You know, in a perfect world,

STEM OPT would be like a chance for you to prove yourself to the company, then you

can get the H-1B? Right? "Oh, let's see if this guy is good enough, then let's give him a

work visa." But it does not work that way. It's just [sigh], I don't even know what it is.

In this passage, David recognized that, like him, the company was doing everything they could

within the current visa regulations to keep him in his position and in the country. Furthermore, he

felt he was doing what he could to prove himself and that, "in a perfect world," that would be

enough.

David's story helps illuminate the spatial and temporal in-betweenness international

graduates experience while on OPT and how these betweennesses influence their relationships.

He was working a job that he enjoyed; learning and gaining experience from an employer who

was doing what they could to retain him. Yet, as he looked toward a future that would be

determined by a lottery, he felt suspended "on loaned time," unable to fully live his life in the

present time or place. David notes that these pressures had implications for both his personal and

professional life. Moreover, when David considered questions related to staying or going, he was

unable to see a future for himself back in Venezuela, even as he felt unsettled in the United

States. In the meantime, he hopes to secure the H-1B visa or consider other options in Canada or

pursue further study in graduate school.

Securing Futures Beyond OPT: Concluding Remarks

Taken together, the narratives in this chapter illustrate how the OPT program positions

international graduates in the *in between*. As graduates get their footing in their new jobs, they

also begin to contemplate *what comes next* given the particular restrictions of the OPT program

and the U.S. immigration system's lack of transparent pathways toward permanence. At this juncture, graduates looked ahead to uncertain futures determined by forces outside of themselves; futures formed by employers, policies, and lotteries. In facing these futures, graduates experienced the impermanence of knowing that their time on OPT was limited, which was compounded by the unsettling feeling that, if their plans for staying could not be realized, they would be forced to leave the country. All of this played out against a backdrop of continued urgency and ambiguity in dealing with complicated and consequential visa policies and actors with varying interpretations of these policies. These conditions pervaded and shaped graduates' experiences, decisions, relationships, and encounters.

As this chapter shows, many of the graduates in my study looked to the H-1B visa as the next step to remaining in the United States to work. This required them to subject their futures to their employers' goodwill and the luck of the draw of the visa lottery. Emma, the graduate who said she would not pursue the H-1B path, identified a desire to avoid the "mental health" implications of being subjected to the lottery as reasons for pursuing alternative next steps.

The graduates who intended to enter the H-1 system, however, were aware of the lack of certainty and autonomy associated with this option and constantly contended with the impermanence and unsettledness the policies imposed on them. As the participants hoped to convince their employers to take the costly step of applying for their H-1B visa paperwork, they had to strive to remain in their good graces, even as the employers exercised control over their legal statuses in the country. In this way, international graduates are *stuck* with a given employer, even as they feel a sense of impermanence knowing that, despite their best planning, they do not have full autonomy over their futures. As David noted, "everything" is "on a timer." Or, as Emma contended, "Basically, until you're a U.S. citizen, everything is temporary."

This sense that "everything is temporary" pervaded the OPT experience, causing graduates to live with the discomfort of not knowing what will happen to them while also knowing much of it is beyond their control. They also know the unsettling feeling regarding the plans they make for staying might never be realized. In response to this discomfort, some considered alternatives to remaining in the United States. Dhara, Xiaoyi, and David reflected on the perceived difficulties of returning to their home countries, unsure of how they might fit within the employment and cultural contexts there after studying and working in the United States. For David, this unsettled betweenness can be represented by the mattress he was apprehensive to finance in the United States, all while reminding himself that at home he did not have a "mattress to fall back on." Given the randomness of the H-1B process and not wanting to return to their home countries, Dhara and David also identified the third option of Canada, with its points-based immigration policies, as a potential "backup" that might allow them to finally enjoy a sense of permanence and being settled.

Continuing the metaphor from the previous chapter, many participants evoked the notion of gambling to represent the unsettledness and impermanence of this life juncture. Referring to the H-1B lottery (itself a gambling term), Dhara spoke directly of "gambling" and Emma compared her odds of winning being less than a "coin flip" and more like a "dice roll." Indeed, if poker captures the metaphor of ambiguity among graduates and other players in this transition, an apt gambling analogy for this unsettled and impermanent juncture is *craps/dice.* At the craps table, graduates may not even get a chance to roll the dice. They don't know if there is a loaded di. But they've got money *on the line*; their jobs are on the line, their relationships, their friendships, their residences are on the line. Their futures are on the line and they are running out of time. The casino is closing and the house can always change the rules. Besides, the joker in

charge has been known to burn it all down before. In the casino, graduates sometimes played with and sometimes against other players (other graduates/transnationally mobile labor, current and potential employers, etc.), but all within the rules set up by and for the benefit of the House—i.e., the state. They don't know how much others might wager (sponsor a visa) or whether they are bluffing (like Xiaoyi's boss). They do not know if others know how to play (like Dhara's employers), or if they have an ace in the hole (some way of *gaming* or advancing within the system). Graduates endeavor to become masters of these complex games as they strategize, splitting, raising, and pulling their bets. With these high stakes, they eye other tables with better odds (fields, paths, or locations) or consider what it might be like to play in another casino (leaving the country).

In sum, this chapter argues that, for the international graduates in this study, the study to work transition does not end when they don their caps and gowns, cross a stage, and enter the workplace. Legally speaking, graduates on OPT remain in the United States and are designated as *foreign students.* Yet, for all intents and purposes, the graduates who opened their lives to me in the sharing of their stories were *working*, even as their visas classified them as learners. Given the time limit of OPT compounded by a lack of legal pathways toward permanence, participants thought about their future options—of what comes next—in terms of the potential visas they could attain if they wished to stay or what it might be like to go back to their home countries if they were unsuccessful in their plans to stay. Knowing that the time allotted to them through OPT was limited, all the participants articulated a sense of impermanence in their stories. Recognizing that they would be forced to leave once the time was up if they could not secure their next visa created a feeling of unsettlement for graduates as they continued to grapple with their transnational status and the question of staying or going.

Chapter Six: Discussion: Reframing mobility scholarship and practice

Throughout this dissertation, I have addressed underexplored questions regarding transnational mobility and higher education, namely how the OPT visa extension shapes the study to work transition for international STEM graduates. This study was fundamentally concerned with understanding the lives of international graduates, whose realities and trajectories in higher education span the globe and are both influenced and directed by visa policies. The stories shared in the preceding chapters depict how the requirements of the United States' OPT policy contour the temporal and spatial dimensions of these students' transition. Their stories also address a gap in the literature through the qualitative centering of their perspectives and provide nuanced understandings of how international graduates experience the affordances and strictures of policy.

Centering the voices of graduates encourages us to recognize the real-world realities, influences, and power of policy in shaping people's lives. In other words, when policy is analyzed in terms of the experiences of people who navigate it, a different understanding of its effect can be reached. While policies like OPT and H-1B are often conceptualized as methods for attracting global talent and contributing skilled labor to the economy, it is necessary to explore beyond the *stated purposes* of a policy to explore its impacts on persons' realities. Regardless of the intended outcomes of a given policy, to generate true understanding of the policy reality requires engaging directly with those who are subject to it and inquiring into the meaning it imparts on their experiences.

In this discussion chapter, I outline how the findings of this dissertation contribute to and expand theoretical and empirical conversations regarding international student experiences and transnational mobility. This exercise is necessary given that international students are still largely viewed as "temporary sojourners" in U.S. higher education scholarship, a designation that does

not explicitly engage the burgeoning migration scholarship on transnational student mobility. Put another way, understanding important elements of international students' lived mobility experiences in U.S. higher education research is largely incomplete. This study has attempted to address this gap by applying the *traversing systems* ecological stance (Garton, Grimm & Kim, 2021) to explore the lived experiences of graduates' transitions within the dynamic, complex, transnational contexts in which they are embedded. In what follows, I use participant quotes and refer to the narratives shared in previous chapters to make connections to the findings and guide the reader in understanding the transnational elements of the lives of graduates, drawing connections to and expanding upon current literature. I argue that an approach based on phenomenological epistemology is necessary for providing more nuanced understandings of mobility as lived by mobile individuals. This approach further enables us to account for the complicated ways that complex and dynamic contexts (e.g., visa policies and crossing borders) interact and, thereby, shape the choices and relationships that determine said experiences of mobility.

In this chapter, I first reiterate the findings of the previous chapters, then situate those findings within a globally-oriented ecological framework (Garton, Grimm & Kim, 2021). Here, I argue that this *Traversing Systems* stance on mobility, combined with a phenomenological approach to the study of lived experience, allowed me to conduct a different kind of policy analysis, focusing in-depth on the *lived mobilities* of international STEM graduates. In this discussion I argue and demonstrate how this framework provided opportunities to (1) conceptualize mobilities within complex and dynamic contexts, locating the influence of policies in these spaces, (2) draw connections to and advance relevant literature regarding global mobility and higher education, (3) and outline opportunities to refine practice and advocate for policy

reform. Following the section on the traversing systems model, I directly engage the literature on international students/graduates and provide a critique of the frameworks that have traditionally been used to study mobility. I specifically situate the experiences of the international graduates in my study within developing discussions of how these mobile persons' experiences and choices are implicated in the education-migration nexus. I show how, in this nexus, they experience a form of "middling transnationalism" and various gradations of belonging (Robertson, 2013) as a particular feature of navigating US immigration policy. This section is followed by a discussion of implications for policy and practice, whereby the graduates' narratives presented in this dissertation can inform movement toward higher education practices that can better and more ethically serve current and future international students and graduates.

Summary of Findings

The narratives shared in the preceding chapters depict how the guidelines and timelines of OPT—as well as OPT's positionality within the broader U.S. immigration regime—shape the temporal, spatial, and relational dimensions of international students' post-graduation mobility experiences. In other words, I examine how the necessities of the study to work transition and of considering one's future in the face of immigration requirements and realities influence how graduates experience their time *being* in the United States and their relationships during these transitions. I contend these accounts encourage us to think not only how the OPT policy enables international graduates to remain and pursue work in the United States, but also to how the policy constrains those experiences.

The first findings chapter, Chapter Four, explored the study to work transition for international STEM graduates. This chapter highlighted the urgency and ambiguity that permeated participants' efforts to graduate and find and begin employment upon completing

their studies. The stories shared indicated that having such a limited period of time (60 days) to find and start work added tremendous weight to the temporal dimension of this transition experience. At the same time, as graduates hoped to quickly secure a position and extend their status, they were pulled in multiple directions as they navigated ambiguous employment contexts, wherein graduates, employers, and university personnel were often operating with different understandings and degrees of willingness to engage OPT policies. This ambiguity shaped the spatial elements of the transition experience, in which graduates endeavored to move from studying to working. In particular, they needed to become knowledgeable about the policy in a space where the advisors guiding them and the employers they hoped to convince to hire them had sometimes not even heard of OPT, let alone knew how to guide someone through the process.

The second findings chapter, Chapter Five, further explore graduates' experiences with OPT beyond securing a job and demonstrated the challenges they faced in making plans for their futures. I explored how OPT's temporariness and position within a broader immigration regime deplete of transparent and stable pathways to legal status created feelings of impermanence and unsettledness in participants as they planned their next steps after OPT. The sense of impermanence framing the temporal dimension of this experience is tied to the fact that graduates must secure further status authorization to remain in the U.S. after their three years of OPT (including the STEM extension) are complete. Yet, because securing a work visa through the H-1B system requires not only an employer's sponsorship, but also the winning of the visa lottery, graduates articulated a sense of unsettledness in knowing they might have to leave the country if they were unsuccessful.

A Critical Reframing of Mobility: Person and Policy in a global context

The experiences shared with me for this dissertation study prompted me to reconsider how we talk about and frame international students' experiences in U.S. higher education. While I do not presuppose that the stories participants shared are generalizable to the experiences of all OPT graduates, the salient findings from my study can be used generatively to inform relevant conversations in the higher education and mobility literatures. In the following pages, I review how ongoing theoretical and empirical conversations informed my findings and how my findings might nuance these conversations. I begin by returning to the revised ecological framework developed with my peers concurrently while writing this dissertation (Garton, Grimm & Kim, 2021) to advocate for a more nuanced framing of lived transnational mobility and to integrate my findings with relevant literature.

A Traversing Systems Model for Mobility

Throughout this dissertation, I pursued a nuanced understanding of mobility experiences as lived by mobile individuals, while taking into account how complex and dynamic contexts (such as visa policies and crossing borders) interact and shape the choices and relationships determining these mobility experiences. More specifically, I sought to explore the mobility experiences and decisions of agentic persons within complex contexts to clarify how policy constrains and enables their current and future possibilities and realities. It was especially important to me to address the issue of structure-agency in mobilities that are pursued as a result of mobile individuals' anxieties and aspirations, while recognizing that these experiences are shaped by the complex, dynamic spaces such individuals are required to navigate.

The *Traversing Systems Model* (which I co-developed with colleagues in a project parallel to this dissertation))(Garton, Grimm & Kim, 2021) provides such a tool by expanding

Bronfenbrenner's (2005) ecological approach to account for the developmental experiences of those whose lives cross borders. Such a framework can locate the types of push pull factors that migration/mobility scholars identify to be important in making mobility decisions, but in a more nuanced way that explicitly explores the complicated contexts within and across nation states. This approach advances extant understandings of transnational experiences by clarifying the salient temporal and spatial dimensions of living across borders.

Such a tool allows us to analyze the multiple social, political, economic, and cultural contexts in which international graduates are embedded, how these contexts are connected, and how they shift over time. As such, this framework is not only useful in conceptualizing how graduates' lived experiences are embedded within broader systems, but it also highlights the importance of research that explores lived experience with mobility (transnational and transitions to work) that often do not prioritize qualitative or phenomenological approaches. Locating a policy within an ecological framework thus allows scholars to conceptualize how spaces (e.g., nation states) are constructed, inhabited, and felt by the mobile persons subjected to their policies. The utility of this model also extends beyond scholarly application. Taking an ecological approach to mobility experiences further allows practitioners and policymakers to examine how their practices and policies shape mobile persons' decisions and lives.

This integrated model, titled *Traversing Systems: Transnationalism and Ecological Fluidity* (Garton, Grimm & Kim) utilizes the classic nested systems format of Bronfenbrenner's (1979, 2005) models. However, rather than one ecology with the individual nested in the middle of the microsystem, the *Traversing Systems* model situates the individual between two separate ecologies. At the center, a person has one foot in their home country and one in their host country, suggesting that the elements of that person's identity and experience are simultaneously

shaped by persons, interactions, and systems in both ecologies. Functionally, individual development within a given ecology occurs in the same ways described by Bronfenbrenner and his adherents: through interactions among the systems and through proximal processes of interaction with persons in given contexts across time (Person, Process, Context, Time).

In the model, the figure at the center straddles both ecologies, symbolizing that movement is neither unidirectional nor permanent. This is meant to postulate the mechanism through which individuals bring elements from their original ecologies into their new ones. Given this, the traversing systems model effectively complicates the notion of ecological systems (Bronfenbrenner, 1979, 2005) through the addition of a distinctly transnational element (Vertovec, 1999). Keeping the two systems separated and connected only through the individual denotes that any interplay among divergent systems is likely to be a direct result of the decisions and connections made by the individual at the center. Individuals bridge these ecologies through geographic movement, technology, and/or their transnational identity (Vertovec, 1999).

An additional element in the model is what we call the *Chrono-Geosystem*. The *chrono-geosystem* is positioned within circling arrows to signify mobility across time and geographic space (Garton et al., 2021). Bronfenbrenner's component of the *chronosystem* allows for theorization of development as contexts shift over time but does not consider how geographic location might also change with time. Given recent patterns of mobility, particularly among the highly educated (Basch et al., 1994; Robertson, 2013; Vertovec, 1999), it must be acknowledged that contemporary forms of movement are neither unidirectional nor permanent. Moreover, recognizing that divergent systems exist within larger geo-systems allows us to see globalization processes and the realities they produce, while recognizing nation states as important players in these processes. Adding this element enables critical considerations of how individuals

139

implicated in complex mobility patterns are subjected to and interact with variant systems as they traverse contexts. Thus, the traversing systems model can be used to interrogate multiple types of trans*national* mobility.

Especially relevant to this dissertation study is how visa policies influence the lived experiences of graduates and how the policies themselves are subjected to broader social, cultural, and political forces and trends. Policies like OPT can be conceptualized as situated within the host exosystem. Yet, as the preceding chapters illustrate, the OPT policy guidelines and timelines are instrumental to graduates' experiences in school and work microsystems and as they endeavor to move from the former to the latter. In sum, OPT does not exist in isolation—it is informed by cultural and economic contexts in the United States (host macrosystem), which turn are in turn responsive to shifting political and geopolitical dynamics at the national level and beyond (Chronogeosystem).

The preceding findings chapters presented a phenomenological rendering of international graduates' study to work transitions and indicate that their future considerations are influenced by OPT and other visa policies. Yet, during our interviews, participants shared stories that highlighted other transnational elements of their lives. In the following section, I detail how the spanning systems approach can be used to frame the mobility experiences of the graduates in my study. In particular, I explore the *proximal processes* within home and host countries systems relevant to graduates' transitions by assessing how these systems are connected.

Host Ecology. In the telling of their transition narratives, graduates primarily shared stories about their relationships and experiences in the host school and work microsystems that recounted their encounters with proximal processes in these systems. Below, I highlight notable elements of the school and work microsystems participants shared and draw connections to

existing literature on international students. I then explore how the various systems in the host ecology (meso, exo, and macro systems) presented themselves in the graduates' experiences in this study.

School Microsystem.

"But there is only so much they can do" -David

In preparing to transition from study to work, participants navigated relationships and processes in their school microsystems whereby they attempted to assess various stakeholders' knowledge about visa policies and their capacities (or lack thereof) to guide international students through said policies. As such, when talking about their interactions with different services in the university (e.g., the international office, their advisors, career services, etc.), graduates reported varying degrees of willingness and ability to help. When referring to the university's office for supporting international students, David, Casey, and Ida conceded that this office "cares" and are often "helpful,"—but as David said, "there is only so much they can do." The participants who shared stories related to their advisors similarly reported a mixed picture of wanting to help but not having the awareness or fully informed ability to guide students' transition experiences under OPT. Ida, Xiaoyi and Casey both reported difficulty convincing their advisors and supervisors to appreciate the importance of making their future plans in terms of what visa policies allow. David noted, "I know my advisor in engineering had no idea what OPT was" and reported that the college career center was also not equipped to address his concerns.

The stories shared in this study reflect many of the themes discussed in the growing literature on international student experiences in the United States, particularly regarding their encounters with institutional support services that are ill-equipped to address these students'

specific needs (Briggs & Ammigan, 2017; Shadowen et al., 2019) or were uninformed about visa policies (Balin et al., 2016). The graduates in my study therefore had to develop strategies for attaining viable information and support in systems where those services were often not equipped to adequately serve them.

Work Microsystem.

"Some people in my office think that once I get my H1-B, I will be a citizen, which is cute, but it is not at all how it works." - Dhara

The other side of the study to work transition is the employer. Experiences related to the work microsystems were therefore salient components in graduates' stories. Similar to how graduates needed to evaluate the knowledge and capacity of support structures in the university, they also had to identify (potential) employers who were knowledgeable and willing to hire them under OPT. After they began working, participants reported a variety of negative, positive, and neutral relationships with supervisors and coworkers, each relationship influenced by relevant OPT policies as well as students' international statuses. Among the most negative encounters was Xiaoyi's story from Chapter Six, wherein she discovered her boss was misleading her about applying for an H1-B visa and Emma's story about being paid less than her coworkers doing the same job because the OPT policy permitted her employer to do so.

Other graduates, however, reported largely positive relationships at work. Dhara, for example, noted the close-knit feeling of the small family company she was hired by influenced her to choose that job and stay, even as she lamented that her coworkers could not understand the vulnerable position the policies placed her in. Similarly, Casey described a relationship with a thoughtful and supportive supervisor who was encouraging of her plans to attain a green card but reported frustration with the fact her supervisor was unlikely to alter the employer's policies

regarding international employee sponsorship. Like Casey, David shared about his positive

relationship with his supervisor, a former international student who had himself transitioned

from OPT to H1-B within the company. This relationship reassured David that such a future was

possible for him as well. Yet, at the same time, he remained ever aware that there was nothing

that his supervisor could to do increase the likelihood that he'd be selected in the H1-B lottery.

The discussion above nuances scholarly understandings of how employment is implicated

in mobility decisions. For example, while Hazen and Alberts (2006) found that 64% of the

respondents in their survey identified "better job/career opportunities in the U.S." as a motivation

for remaining beyond graduation (p. 209), the stories of the graduates in this dissertation study

emphasized the *existence* of employment opportunities was not their primary concern. Rather,

the process of beginning employment and planning for their futures beyond graduation appeared

to shape how employers responded to visa polices like OPT and H1-B that provide graduates the

legal status to work and reside in the United States beyond study.

The participants' experiences outlined in this dissertation also reflect findings from recent

research on the experiences of international graduates transitioning from study to work in

Australia. Given such research in the U.S. is lacking, these studies have been particularly

informative to my dissertation. Specifically, Tran et al. (2020) found graduates in Australia also

confronted environments where the schools enrolling them and the employers hoping to hire

them had limited to no capability of engaging international graduates in their transitions under

relevant visa policies. Similar to the graduates who shared their experiences with me, Tran et al.

(2020) noted the graduates developed various strategies, including demonstrating strong

resilience, proactively explaining visa policies to employers, vigorously searching for and

applying for jobs, and networking and creating opportunities for themselves and other graduates

(p. 15). Unlike the policy reality in Australia, the graduates in my study navigated a study to work transition within the U.S. visa regime, which is marked by detached temporary statuses and lacks pathways to citizenship, issues I return to later in this chapter in more detail.

The graduates' experiences in my study further reflect migration literature research regarding the experiences of skilled workers in the United States' H-1B visa program (Chakravartty, 2006; Sahoo et al., 2010). Salient similarities between H1-B and OPT include the temporary nature of the program and the contingent relationship between international employees and their sponsoring employers. As employers and the federal government have the right to terminate visas at any time, "temporary migrants feel a situation of 'neither here nor there' and this has several impacts on migrants, both psychological and socio-economic" (Sahoo et al., 2010, p. 306). The participants in my study discussed, Emma perhaps most saliently, that STEM OPT, like H-1B, effectively ties graduates to their employers, making mobility difficult and creating a significant power imbalance between employers and their international workers that opens the door for exploitation (Chakravartty, 2006). Unlike H-1B visa holders, those on OPT do not have the additional protection of the prevailing wage requirements placed on employers of H-1Bs that requires them to compensate workers at fair market wages. As graduates on OPT remain under the legal authority of the HEIs that enroll them—and recognizing that these HEIs have limited capacities to ensure equitable treatment within the workplace—OPT policies perhaps place graduates in an even more disadvantaged position vis-à-vis employers.

Transnational Peers – A Shared Mesosystem.

"I talked to my college friend [who is] also in the U.S. Both of us are facing very similar situations." -Xiaoyi

In the face of navigating the study to work transition in the United States and the many challenges of host school and work microsystems outlined above, graduates often turned to other transnationally mobile students who are or have navigated these transitions. Participants particularly spoke about how international students, especially those from the same home country, provided information and resources to guide them in navigating their studies and the study to work transition. Dhara and Xiaoyi both told me that it was through communicating respectively with Indian and Chinese student groups in their field of interest that they learned about OPT, identified their program of study, and selected MRU based on their peers' guidance.

Notably, these peer groups were valuable in filling the information gaps left by schools and employers regarding hiring under OPT. Graduates relied on these relationships and collectives to determine which employers might be willing to hire international graduates and how to navigate those conversations and processes. Graduates further used these as spaces to commiserate with peers, process their experiences, and map their futures according to the examples of "successful" others. Graduates were often contributors to as well as beneficiaries of these communities. Ida, for example, told me how, after she navigated the OPT, export license, and H1-B application and withdrawal processes, many students and graduates consulted her for advice.

Within the language of the spanning systems model, the importance of these international peer communities is likely rooted in these persons' similar transnational meso systems. Unlike other people the graduates encountered during their transition (e.g., institutional/employer representatives, loved ones at home, domestic peers, etc.), their international peers have similarly come from outside the country to experience higher education and the employment process in the U.S. and, in doing so, have had to navigate the U.S. immigration regime. Their overlapping

experiences and shared obstacles enable them to turn to each other to make sense of these experiences and to build individual and collective senses of belonging, as well as develop strategies for navigating futures that are similarly constrained by visa polices and realities in which stakeholders respond unpredictably.

These findings reflect discussions of international student enclaves (Chen & Ross, 2015; Page, 2019) and the variant ways international students engage with the university during their time as college students (Zhao et al., 2005). Such peer communities create spaces for international students to process and navigate their shared experiences while planning for their futures. Consequently, scholars and practitioners should invest in attuning to and understanding engagement in these communities and how that engagement might relate to other important college outcomes.

The Host Exosystem and Macrosystem.

"I think I had to tell him multiple times, 'you don't want to mess around with my visa because I could get kicked out of the country." -Casey

As illustrated throughout this dissertation, participants' experiences in the school and work microsystems and in the mesosystem that encompasses the encounters in the transition between are heavily influenced by visa policies (OPT). Taking an ecological approach to conceptualizing these policies within the host exosystem allows us to take account of the contexts in which these policies are embedded: the host macrosystem (Bronfenbrenner, 1993) and the broader chrono-geosystem.

The primary focus of this dissertation was to detail how encountering the OPT policy and guidelines contoured graduates' experiences. This observation is consistent with recent quantitative research in which similar conclusions have been drawn about visas and student

decision making: "that student and work visas influence international students' decisions about where to study, what to study, and how much education to pursue" (Jacobs, 2020). Similarly, Kato and Sparber (2013) used data from SAT takers prior to 2000 to point to how a reduction in the H-1B visa quota resulted in a decrease in international student SAT score submissions to U.S. colleges. Exploring visa policies and students' decisions to apply abroad, Chen et al. (2019) used the term "the chilling effect" to refer to "the discouragement of action" resulting in students' reactions to adverse F-1 policies (p. 4). Participants in my study were cognizant not only of the ways visa policies shaped their lives and decisions, but also of the ways these policies were situated in and responsive to shifting economic, societal, cultural, political discourses, and trends regarding immigration and the belonging of the *foreign other*. Dhara, Ida, Casey, and Emma, for example, discussed how the election of Donald Trump and some of his proposed policies influenced how they were processing their present experiences and planning for their the precarity of the near future. In some cases, it caused them to question the stability of their current visa status and to worry about how shifting politics might impact future options. These findings echo emerging observations about how international students have been impacted by the Trump era (Rose-Redwood & Rose-Redwood, 2017; Laws & Ammigan, 2020).

Relatedly, graduates were cognizant of how immigrants were perceived in American society and how such perceptions impacted the immigration regimes they had to navigate. Namely, discourses about skilled migrants influenced how graduates thought about the skills and experiences they accrued while studying and later working on OPT. Each of the participants in my study recognized that their STEM education and working experience imparted them with ostensibly valued skills to the U.S. economy and society. Yet, despite this recognition, they lamented the fact that the current immigration regime was structured such that the U.S. economy

and society could benefit from their labor—temporarily and on its own terms—while inhibiting participants' autonomy and precluding their ability to make demands on the state. These recognitions directly influenced their feelings of unsettledness and belonging and accentuated the betweenness international graduates experience during this transition. In this way, the graduates' narratives in this dissertation demonstrate how policy has shaped their lived experiences, their ability to succeed, and their feelings of belonging. Although international graduates are far removed from the decision-making processes of relevant visa policies, these policies are an intimate element of their lives, contouring the spaces they inhabit and their encounters within them.

Home Ecology. Although graduates' narratives of their transitions primarily encompassed encounters in host ecology systems, as transnational persons, these systems also influenced their experiences and decision-making. Specifically, participants' relations with family and friends in in their home countries tended to shape their transitions from study to work in the United States. Thus, while they were no longer geographically situated in their countries of origin, the home ecology continued to play a key role in how they navigated this transition and planned their futures. The following section explores how the elements and systems in graduates' home ecologies influenced their experiences of mobility.

Family Microsystem.

"Nobody in my family has ever traveled abroad to study. So, it's like moving to a new place all alone and figuring all of it out." -Dhara

Each of the participants in this dissertation study shared accounts of family members who remained in their home country. In general, the graduates leaned on their families for various kinds of support and encouragement but articulated frustration in their loved ones' inability to

fully understand the realities of their transnational experiences, particularly how visa policies shaped those realities. For example, Ida was appreciative of her parents' continued support over the nine years she spent doing her PhD studies abroad but felt distance between them due to her struggles to communicate her visa challenges. Dhara articulated a similar disconnect as the first in her family to study/work outside of India. Participants' relationships with loved ones in their home countries also shaped their goals in terms of whether or when to return home. Dhara, Xiaoyi, and Jian each had parents beckoning them to return, but they were determined to carve out their own paths. In this regard, Jian talked about wanting to "prove [her]self" to her father, while Xiaoyi spoke about how she would be made stronger if she was allowed to "struggle in life." When he started working, David's relationship with his parents changed as they relied on remittances from his salary to help cover their cost of living following the political and economic turmoil in Venezuela. This new responsibility added extra weight to his transition and future planning.

These observations regarding participants' relationships and connections with their families in their home countries affirm findings from previous studies in which such relationships informed students' experiences and decision-making (Han & Appelbaum, 2016; Hazen & Alberts, 2016; Lee & Kim, 2009; Medendorp, 2015; Szelényi, 2006). Whereas these scholars tended to frame family considerations as pull factors informing decisions to return home after completing their studies, the graduates in my study demonstrated that these relationships are dynamic and not necessarily determinative. Though graduates did indeed express a variety of feelings regarding connection and obligation to their families, these relationships and their maintenance across borders were defined by constant negotiations whereby graduates considered and reconsidered their futures to decide where they might want to be located.

For the transnational graduates in this study, relationships with family members were important connections to home, maintained by communications technologies that lessoned the distance between them. However, the participants in my study articulated that these relationships were inhibited by their families' and friends' limited capacity to understand the elements of their lives that were unfamiliar to them because they did not share similar experiences. Responding to the visa regime and navigating issues of status was a particular issue graduates identified as difficult to communicate to their loved ones back home. Geographically removed from home, participants felt the distance in their relationships increasing according to a lack of shared experiences and understanding. Such conditions were thus likely to increase their sense of isolation and vulnerability at a time when they felt their divergent experiences made it difficult for those in their host school and work microsystems to appreciate their circumstances.

Home Exosystem and Macrosystem.

"It's the second largest population in the world. So, it's very competitive. I mean, even if you are really good, you wouldn't get [the] chance that you deserve". -Dhara

Some graduates framed their experiences transitioning from study to work in the U.S. in terms of what it would be like if they were making the same transition in their home countries, thereby indicating the continued influence of the home exosystem. For instance, Jian, Xiaoyi, and Dhara reflected on the competitive nature of the employment market as driven by large populations in China and India and contemplated what it would mean for them to return home. Xiaoyi was worried about standing out among a large number of returning Chinese students who also attained credentials abroad. Jian expressed concerns about her ability to adapt to Chinese work cultures and relationships after living, studying, and working in the U.S. for the entirety of her adult life to that point. Dhara was concerned about whether her degree would be applicable

in India without adequate work experience. And, while ruminating on his prospects in Venezuela, David was blunt: "I am not going to find a job."

The graduates who brough up the work contexts in their home countries while recounting their experiences did so in a way that nuances existing understandings of international graduates' decisions to stay or go (Han & Appelbaum, 2016; Hazen & Alberts, 2016; Lee & Kim 2009; Medendorp, 2015; Szelényi, 2006). The competitive or hostile employment markets participants perceived to exist in their home countries could be considered as a "push" factor deterring them from returning home. However, perhaps more importantly, the graduates' professional training occurred in the U.S., so they understandably perceived potential difficulties when they imagined returning to work in their home countries. These sentiments were reflected in recent research indicating that Chinese employers were reluctant to hire applicants with international credentials (Chen, 2019). As person's move around the world to pursue education and attain work experience outside of their home country and their present experiences and future decisions continued to be informed by their connections and perceptions of home. These considerations underscore the complicated realities and spaces transnationally mobile persons must confront and navigate in pursuing mobility through education. Policies intended to influence their mobility (i.e., those meant to attract or retain students, entice students to return, etc.) must thus be examined in the context of these complicated realities.

Going beyond current understanding of global mobility

Beyond push-pull. In prior literature, while scholars have extensively utilized push-pull framework to explore post-graduation mobility intentions as students weigh personal and professional considerations for staying or going (Gesing & Glass, 2019; Han & Appelbaum, 2019; Hazen & Alberts, 2006; Szelényi, 2006), the framework needs to be expanded to account

for the role of the visa policies that enable and constrain their ability to stay. Moreover, because these aforementioned studies collected data from surveys of *current students* and inquired about their *intentions* after graduation, my study, which explored the *lived experiences* of *graduates* as they make the study to work transition, can offer a more nuanced perspective of mobility experiences at this juncture. Specifically, the stories of the graduates emphasize that push and pull forces are dynamic, interrelated, and exert themselves in different ways and at different times, rather than presenting themselves during a one-off deliberation of desirable or undesirable conditions in one place or another.

Existing scholarship exploring international students' stay-or-go decisions upon graduation has identified career considerations in the U.S. as the primary pull factor (Gesing & Glass, 2019; Han & Appelbaum, 2019; Hazen & Alberts, 2006; Szelényi, 2006). The graduates in my study would agree that working in the U.S. (i.e., the intended purpose of OPT) was a primary factor influencing their intention to remain after graduation. However, their stories indicate that, while *desired* employment may be a pull factor beckoning graduates to stay, observers must also consider the visa policies that allow access to those opportunities. In this way, favorable policies ensuring a smooth study to work transition might themselves be considered pull factors, whereas perceptions of hostile or unclear policies might be conceived of as push factors discouraging mobile persons from remaining. The ambiguity and unsettledness experienced by graduates in their transitions, however, reveals how visa policies operate as a *mediating factor* between graduates and their desired outcomes. Even if employment opportunities are abundant, international graduates must first persuade an employer to hire them under OPT and then convince them to sponsor an H-1B application. Even then, these graduates must hope their applications will be selected through the visa lottery. Graduates must thus make

plans for futures they know will largely be determined by what is possible given the provisions of OPT and how stakeholders respond to the policy itself. As such, stay or go decisions are not a one-off weighing of push and pull factors. Rather, they are something that graduates live with as they constantly consider and reconsider what is possible or plausible given the options the potential visas allow.

What's more, the push-pull framework as it is currently conceptualized in the mobility literature typically frames push and pull factors as discrete considerations, bound within nation-states that operate independently to exert oppositional force on border-crossing subjects. Such a framing does not account for the ways factors and conditions in given locales are interconnected, mutually determinative, and embedded within broader contexts that are themselves encountered and shaped by mobile persons. The current framing thus makes it difficult to make sense of how visa policies that enable graduates to remain and work after completing their studies can be either push or pull factors while also playing a mediating role. As such, more nuancing is necessary to provide clarity regarding how graduates experience the complexities of this transition. It is my contention that by endeavoring to disentangle overlapping contexts within mobility experiences, the traversing systems ecological approach presented above can provide such nuance.

Another issue with the push-pull approach is its determinative nature that often reduces the complexities of mobility decisions and motivations to a neoliberal market-oriented consideration of what economic opportunities are available in home and host countries. Doing so assumes rational actors make decisions based on utility maximization calculations. This approach not only unjustly simplifies international graduates' experiences by highlighting the economic and diminishing other factors contributing to post-graduation experiences (e.g., visa

policies), but it also fails to account for individual agency through its prioritization of macro trends and assumption that individual opportunities are contingent on factors largely beyond their control. Given this, a push-pull approach is incapable of accounting for the ways graduates encounter and shape their environments and experience their transitions in unique ways. An approach like that provided by the traversing systems model can alternately account for complex contexts by centering the experiences of mobile individuals. Such an approach, I argue, is more optimally suited to frame the complex spatial and temporal dimensions that shape international students' mobility experiences and encounters.

Rethinking Citizenship and Transnationalism

The findings shared in this dissertation reaffirm the need for reconsidering our understandings of mobility and higher education, particularly as visa policies blur the boundaries among school, employment, and the state. The experiences of the participants who shared their stories with me demonstrate how transnationally mobile persons encounter the U.S. immigration regime and how its bureaucratic hurdles to belonging shaped their choices and experiences. These findings therefore have important implications for conversations regarding transnational mobility, citizenship, and other forms of belonging that implicate policy and the nation state in the lived experiences of mobile persons. By centering the lived experiences of graduates currently enrolled in OPT, this study revealed how the OPT policy creates an unstable temporal and spatial zone of betweenness that enables graduates to continue to accrue the skills and experiences necessary to access varying degrees of social and cultural citizenship in the U.S., while systematically denying them transparent and stable pathways to legal citizenship.

Fong (2011) has operationalized the concepts of cultural, social, and legal citizenship in a longitudinal study of transnational Chinese students, building on scholarship that explores what

categories of citizenship mean for people living transnational lives. *Legal citizenship* is determined by the state and refers to the "set of legal rights based on how one is classified by documents such as passports and residency cards," (p. 13). Fong (2011) specifically uses *social citizenship* to include "a status which gives one access to certain standards of living, education, health, income, mobility, prestige, and comfort" (p. 13). Finally, *cultural citizenship* refers to "a status of belonging to a community in ways that are felt by the individual and recognized by others" (p. 13). Here, it is important to note that citizenship is not something "one either has or does not have but [is] rather fuzzy statuses that an individual can have more or less of at any given moment" (p. 13). Together, these concepts are useful for understanding the process of OPT graduates' marginalizing experiences.

By operating as a student visa extension whereby graduates can remain in the country to work, OPT allows international graduates to continue amassing skills and experience—i.e., attaining a STEM degree from a U.S. HEI and employment at a U.S. company—that can allow them to accrue social citizenship in the U.S. and develop a certain sense of community and belonging from living in the country for an extended period. However, due to the policy's three-year limit combined with a lack of pathways toward permanence, legal citizenship remains distant and seemingly unattainable. These policy stipulations thus engender the impermanence and unsettledness discussed in Chapter Six and impede graduates' ability to pursue deeper levels of social and cultural citizenship and belonging. In other words, the F-1 and OPT policies enable students to study and work in the U.S. and contribute tuition dollars to the universities enrolling them in increasingly higher numbers (IIE, 2020), specialized labor for employers filling in-demand roles, and tax dollars to the state. Yet, notably, these policies allow access to certain opportunities (temporary work) while denying access to citizenship rights. Therefore, as

international graduates exercise their cultural citizenship to belong, they must also recognize that they remain, in essence, immediately deportable should they violate the conditions of their status in regard to their relationship with their school, employer, or the state—each of which can determine to invalidate the visa providing graduates the legal right to work and reside in the United States. In living, studying, and working in the U.S. for numerous years, graduates experience different degrees of belonging in this country. Yet, even after attaining degrees within STEM disciplines and work experiences in in-demand fields, international graduates are made to live as peripheral citizens, subjected to the rules of the state but unable to make demands on the state or claims of legal belonging.

This dissertation also advances current understandings of transnationalism in international student mobility, once again calling on these discussions to account for the role of visa policies in shaping transnational social morphologies and consciousness (Vertovee, 1999). As transnationalism has been defined as the processes by which those whose lives span borders "forge and sustain multi-stranded social relations that link together their societies of origin and settlement" (Basch et al., 1994 p. 7), it is crucial to understand the role of visa policies in this process. As argued throughout this dissertation study, OPT places graduates in a position of betweenness—between university and employer, between home and host counties—as they transition from study to work and consider futures in the U.S. While discussions of international student experiences have rightly framed these experiences as transnational (i.e., as across borders or existing beyond borders), they have neglected to interrogate how visa policies mediate this spatial dimension by engendering unsettledness and a truncated temporal dimension of impermanence. What is notable for the graduates in my study is not so much that their experiences were transnational, but that their transnational experiences took on dimensions of

urgency, ambiguity, impermanence, and unsettledness because of the ways OPT enabled and constrained their trajectories by influencing their experiences, decisions, relationships, and future plans.

In emphasizing the role of policy in the mobility experiences of transnationally mobile graduates in the U.S., this dissertation echoes Robertson's (2013, 2014) exploration of the trajectories of student migrants in Australia. Like Robertson's (2013) participants, the graduates at the center of this dissertation were "embedded in a complex web of regulatory systems that simultaneously enabled and constrained their ability to enter the state temporarily as students and then to accumulate the capital required to [remain]" (p. 3). Framing students as transnationals whose lives span borders, Robertson sought to identify their transnational connections (social relationships), transnational consciousness (imagined fields of connection and belonging) and transnational practices (the ways they sustained relationships and maintained a sense of belonging). This study examined the specific context of international students' navigation of the pathway to Permanent Residence (PR) in Australia and noted participants experienced a kind of "middling transnationalism" characteristics of mobile and skilled flexible citizens and of vulnerable and exploitable labor migrants. As middling transnationals, they faced both opportunity and marginalization and their experiences were defined by a "complex negotiation of capital accumulation, aspiration, and survival" (p. 84). These middling transnationals encountered a "staggered" migration process and "long tunnel" of multiple "gates" they had to pass through to enter and attain belonging in the nation state. This staggered process caused student migrants to "exist for extended periods in various states of insecurity and uncertainty" (p. 70). Robertson argues that, through this process, student migrants experienced "gradations of citizenship" or "spectrums of quasi-membership" ranging from temporary rights to reside or

work to permanent residence, which "can allow flexible mobility and multiple memberships as well as engender differential inclusion and marginalization" (p. 79).

Reflecting many of Robertson's (2013) findings, the graduates in my study shared similar stories regarding the transnationality of their lives. They noted the difficulty of maintaining connections across borders while simultaneously negotiating different degrees of belonging in their host country given the U.S. immigration regime's enabling and constraining of their experiences and choices. As graduates completed their studies and transitioned to their careers, they similarly experienced *opportunity and marginalization* in a *staggered* process wrought with *gradations of belonging* and levels of precarity as a direct result of their encounters with the U.S. immigration regime. In Australia, however, a points-based immigration system allowed graduates to identify transparent pathways toward permanent residency (i.e., gain points to get PR). The intensified impermanence and unsettledness experienced by the graduates in this dissertation study were, alternately, largely determined by the *lack* of such pathways the U.S. (Grimm, 2019). Here, it could be argued that the participants in my study experience increased unsettledness *because of* their articulated desire to stay; that those intending to return home might avoid such feelings caused by the policy. Or perhaps those who decide to go home do so in part to avoid the unsettledness of further embarking along a precarious migration trajectory, wherein permanence is never assured. Nevertheless, although participants were working full time on OPT, they remained legally designated as students on temporary non-immigration visas. Given how OPT is situated withing the broader immigration regime (discussed in Chapter Six), graduates' trajectories are even more staggered, their tunnels even longer, and the gates more numerous and precarious than those described by Robertson (2013). Whereas participants in Robertson's study were striving to accrue the points necessary to earn PR in Australia, the

participants in my study were looking for a sense of security and belonging and hoped to convince employers to sponsor their stays as they hoped their number would come up to win the H1-B visa lottery.

In short, the stories shared by the participants of this study indicate that visa policies like OPT shape people's experiences of transnational mobility and impact how they make sense of those experiences. Yet, given the complicated ways visa policy considerations mediate transnational experiences while themselves remaining susceptible to political and economic shifts, it is necessary to consider these experiences within a framework better suited to account for the complex spatial and temporal dimensions of transnational experiences. In the U.S., international graduates experience particular forms of mobility—i.e., mobility into the country and mobility from study to work—informed by the ways they encounter the ecology of the U.S. and how visa policies shape the spaces they inhabit. I thus offer the traversing systems model as a means for more accurately considering mobility within these complex contexts and transnational dynamics.

Practice and Policy

In addition to advancing theoretical and empirical discussions of transnational mobility and higher education, the stories of the international graduates in this study have implications for practice and policy. These implications, which I discuss below, point to changes that can be made to better improve student experiences and outcomes.

Higher Education Institutions. Throughout this dissertation, I have emphasized the importance of understanding how policy impacts the experiences of recent international graduates in the United States. As international graduates' experiences are so profoundly shaped by the policy context in the U.S., higher education officials have a moral imperative—especially

those working with international students—to be aware of policies like OPT and tailor their services to better serve students and prepare them for success beyond graduation. As an F-1 student visa extension, Optional Practical Training (OPT) is a component of international students' education and they remain legally designated as students even after graduating. Thus, preparing international students to make the transition to work should be a service provided to these students as part of OPT. In addition to the following implications for practice that address various campus units, it is crucial that institutional offices coordinate in unison to provide consistent messaging, advice, and information to international students. Limiting the legal ambiguities of visa policy programs can bolster institutions' missions for inclusion and internationalization by enabling them to deliver more comprehensive support for international student success.

International Student Support. Within HEIs, International Student Support (ISS) offices typically assist students in attaining and maintaining their student visa statuses. The federal government requires HEIs to appoint Designated School Officials (DSOs) to act officially on the institution's behalf when interacting with the Department of Homeland Security on issues related to visa polices and immigration. As such, ISS offices and DSOs are situated to leverage their content knowledge in informing international students about their post-graduation options and processes for enrolling in OPT.

These offices, however, are not optimally positioned to understand the idiosyncrasies and nuances of the employment transition across students' fields and majors. Unlike academic and faculty advisors who are situated in colleges and departments, DSOs are not prepared to advise students on concerns related to their particular fields or employment markets. As such, serving international students in light of how navigating visa statuses influences their experiences is a

responsibility that extends beyond ISS offices. As experts on required DHS and other federal government reporting systems, these units should take the lead in providing information to the relevant stakeholders on how to effectively guide international graduates through their study to work transitions (e.g., faculty and staff, career services, and more). Efforts to align services and messaging can help ensure graduates encounter less ambiguity when engaging various campus services, which in turn can mitigate the complex challenges and ambiguities of navigating OPT.

Department/Program Faculty and Staff. It is crucial for the faculty and staff in programs and departments enrolling international students to account for the ways these students' status requirements and work authorizations shape their opportunities and plans for their futures. To do so, advisors /mentors must consistently work to understand their advisees' lived realities. The stories shared in this dissertation indicate many advisors engaging with international students lack strong understandings of students' visa statuses and how they contour their present realities and constrain their future planning. Those giving field- or major-specific career advice should take into consideration how OPT guidelines and timelines impact the study to work transition. If those working most closely with international students during their studies are fully informed of how navigating visa statuses impacts students' opportunities, experiences, and trajectories, they can better tailor their services (e.g., mentoring) and programming (e.g., curriculum, career planning, etc.) to be relevant to this population.

Career Services. Relatedly, it is crucial for career service offices to account for how job searches and employment processes differ for international students compared to their domestic peers. For example, organizers of university employment fairs should keep international students' realities in mind during planning. This could include educating employers about OPT and the processes for hiring international students. In addition to navigating stressful study to

161

work transitions, it is imperative students do not have to "go around explaining" to employers at career fairs the nuances of visa policies and work authorizations as Dhara did. Career fairs must thus be made more accessible to international students and facilitate employers' uptake of how to hire them. Career offices might also maintain and distribute a centralized, up-to-date list of employers who hire international graduates. Students should not be left to guess who might and who might not engage them in the hiring process, a conundrum participants in this study indicated perpetuated the ambiguity and precarity of their transitions.

Revising National Policy

The ambiguity and urgency graduates experience during their study-to-work transitions might similarly be addressed by informing stakeholders, advocating for international students, and altering HEI practices. Addressing the impermanence and unsettledness of navigating visa policy is a more complex problem. In addition to informing stakeholders on how to navigate visa contexts, higher education institutions should commit to taking a more direct role in advocating for policy changes. The impermanence and unsettledness articulated by graduates in this study are a direct result of how visa policies enable and constrain international students' present and future options. Higher education institutions are thus directly implicated in these processes and play a significant role the mobilities of individuals and populations.

As previously discussed, the United States is unlike other leading host countries of international students (e.g., Canada, Australia, New Zealand) in that it does not have a points-based immigration system or a formal pathway to permanent residence though study and employment (Sá & Sabzalieva, 2018). Rather, OPT is situated among a series of *temporary* visa categories for students and those in specialized fields. Further compounding the pressures imposed by these time limits is that graduates must win a space in the H-1B visa lottery to move

from student F-1 to employment visa categories. Given that students' personal and career trajectories are influenced by these policies, HEIs must individually and collectively advocate for revised visa policies to better serve their students and graduates.

The Presidents' Alliance on Higher Education and Immigration is a key example of collective advocacy and the types of policy revisions HEIs can support to take care of their international students. Founded in 2018, the Alliance advocates for international, immigrant, and undocumented students and "supports congressional legislation, appropriations, and oversight that fulfill our nation's historic aspiration to inclusion and integration" (Legislative Principles, 2020, para. 3). Specific policy revisions to improve international student experiences include allowing them to articulate their interest to stay beyond graduation when applying for a student visa (they presently need to demonstrate ties to home and intentions to return) and ensuring "pathways to stay and work in this country" (para. 7) to "streamline their ability to obtain permanent status after completing their education" (para. 13). The Alliance therefore encourages regulations and legislation not only to protect students in programs like OPT, but also explicitly calls for "establishing a pipeline to a green card for international students" and "increasing the number of green cards to reduce backlogs" (para. 13). These proposed changes would go a long way in reducing impermanence and unsettledness for students planning their futures and for graduates navigating the immigration regime. They would allow for freer mobility and student autonomy by deliberately disentangling immigration from employers and allowing graduates to determine their own professional and career trajectories without undue policy influence (i.e., needing to consider whether an employer is willing to sponsor and won't take advantage of them). Recently proposed immigration legislation advanced by the Biden Administration has

included language to advance these changes and ease international graduates' transitions between study and work (Fischer, 2021).

As universities continue to enroll international students in increasingly higher numbers, it is important they realize that serving this population requires both preparing them to navigate the visa policies that enable and constrain their experiences *and* advocating for more humane policy reform that can benefit these students. As this dissertation has emphasized, studying in the United States is often the first step in a variety of complex migration trajectories for graduates that link higher education to the workforce and the state. Serving international students thereby requires accounting for these realities and addressing how visa processes impact them.

Chapter Seven: Looking Ahead

The process of conceptualizing, designing, conducting, and drafting this dissertation reinforced for me—as a scholar, practitioner, and participant in transnational mobility—the necessity of understanding mobility and its resulting social and economic impacts in terms of the lived experiences of mobile persons. Behind the statistics touting the increasing numbers of persons crossing borders to pursue education and who later decide to remain in the country to pursue work are decisions made by individuals navigating complex realities. These decisions are often reached while concurrently confronting experiences of urgency, ambiguity, impermanence, and unsettledness in graduates' transitions from study to work. What's more, these decisions are taking place in a context contoured by policy. Indeed, recent literature has taken visa policies into consideration in terms of mobility decisions in higher education, demonstrating that these policies shape decisions at the population level (Jacobs, 2020). Through its examination of lived experience, this dissertation helps uncover how these considerations influenced various elements of their everyday lives and plans for the future.

Regardless of a given policy's intended outcomes, to generate true understandings of policy realities requires direct engagement with those who are subject to it and necessitates inquiry into the meaning it imparts on their experiences. Put another way, it is not that phenomenological studies like this one are interesting complements to existing policy research approaches; rather, it is that the attentive study of lived experience must be an integral part of research agendas seeking to comprehensively understand policy implications and outcomes. I firmly believe that interpreting meaning of lived experience (returning to the things themselves) is the optimal approach for exploring and communicating these experiences in ways that visibilize the legal processes that direct mobility in international education. Moreover, when such

lived experiences are situated within frameworks that can contend with how lived experience occurs in complex and dynamic contexts—such as the traversing systems model utilized herein—they can illuminate how policies influence spaces and experiences, while themselves being susceptible to shifting social, political, and economic trends and prerogatives.

As I look ahead in the following sections, I consider the ways the perspectives, approaches, and findings developed in this dissertation might be applied to future research. Where relevant, I also outline how these lessons inform my professional and personal interactions as a transnationally mobile person engaged in higher education.

Students' Lived Mobility Experiences

As I have emphasized throughout this chapter and dissertation, it is crucial to understand mobility in terms of the lived experiences of mobile persons. This dissertation was only concerned with a small subset of transnational experiences related to mobility in higher education: the study to work transition and what comes next as dictated by relevant visa policies (OPT and H1-B). Given this focus, there are many important and exciting opportunities for future study. Namely, future scholars might consider questions related to identity development for transnationally mobile persons as they move around the world and from education to work. My dissertation explored the question of "what's it like?" Therefore, I did not ask participants about how they view themselves in relation to the many in-between experiences they shared.

Given this, I could encourage further explorations of identity and mobility, particularly those that arise when mobile persons confront the histories and cultures of their host countries. In the United States, this would necessarily involve international students' encounters with xenophobia and racial hostility. Questions of agency are implicated here as well. For instance, my study explored the ways graduates struggled and strategized while navigating the complex

166

study to work transition, but did not directly inquire into how participants viewed themselves and their power within these processes and relationships. Finally, the scope of this dissertation necessitated engaging the experiences of a handful of transnationally mobile graduates. Future research might explore how such experiences might be representative of others within this population.

As my own social and geographic mobility in higher education has and will continue to span borders, it is crucial for me to constantly account for the ways my mobility is enabled by policies and how my identity (language, country of origin, whiteness, etc.) positions me to benefit from those policies and mobilities. My identity afforded me access to preferential policies that ultimately enabled my mobility first as a student (full tuition and stipend to study abroad) and later as an educator (foreign expert license) globally through higher education. Thus, as I engage as a scholar practitioner with others whose identities, places of origin, and experiences differ from mine, I must continue to recognize the disparities in how opportunities and policies provide access to mobilities for some while impeding others. I must also use my voice and position to work with others to identify and address these disparities.

The role of HEIs

This dissertation focused on the experiences of international students navigating the transition from study to work in the United States. Future higher education research might take HEIs as the unit of analysis and continue to explore the degree to which university personnel are positioned to serve international students across various institutional types. Specifically, researchers might ask: How do HEIs and personnel (e.g., faculty or student support services) collect and share information regarding student visas and navigating status with those on campus who will interact with international students? Finally, this dissertation explored graduates'

experiences of making the transition from study to work after completing their STEM degrees at a single large, midwestern research university. Future studies might thus consider different types of educational settings (e.g., institutional types or fields and disciplines) to explore how these settings might impact student experiences. Might institutions with varying missions, priorities, and organizational structures be better serving students through these transitions?

As a scholar-practitioner embedded in an education institution, I have a professional and moral responsibility to understand and improve student experiences. This means taking a direct role in exploring how my institution serves international students. It means identifying partners and finding opportunities to connect practice with emerging research about student experiences. Such work specifically includes helping to ensure campus support units are knowledgeable about student visa processes, their influence on students' experiences, and tailoring services to these needs.

The role of employers/employment

Avenues for future research with international graduates and study to work transitions are numerous. My dissertation focused on graduates' perspectives and examined their relationships with employers in terms of how U.S. visa policies contoured those relationships. Future scholarship might build on this by exploring workplace experiences beyond those directly informed by policy in depth. For example, as OPT is meant to be a deliberate learning experience, future researchers could take a lens of workplace learning to assess OPT as a learning space. Meanwhile, other researchers could investigate employer perspectives to ascertain how they perceive and react to hiring international graduates, particularly given that these employers are also enabled and constrained by visa policies. Such research could explore how different types of employers may respond differently to these policies. For example,

168

participants in my study worked at companies ranging from west-coast start-ups to midwestern universities and from small, family-owned companies to large multinational corporations. Future research might also inquire into how graduates' experiences differ according to employment context.

The importance of transnational peers

The findings in this dissertation reveal the key role transnational peers played in navigating the study to work transition. As the affordances and restrictions of visa policies were often incongruently understood by schools and employers, peer groups provided a space of belonging for international graduates in which they could collectively navigate a shared transnational space governed by visa policies. Moreover, this was an important space for them to gain knowledge and advice to inform decision-making. Future scholarship could thus explore how these communities emerge and the needs they fill for students. For instance, one of the participants in this study alluded to Facebook groups through which students share resources for navigating visa policies and processes. Such a platform could be a fruitful location for exploring how these groups interact. Relatedly, as HEIs contend with how to better serve international students through and beyond their studies, research and practice should explore different ways to foster and support these student groups.

Considering relevant policies

This study highlighted the important role of policy in international graduates' mobility and transition experiences. Future studies should continue investigating how international students receive and respond to messages regarding immigration and immigration policies, particularly as these policies are subject to fluctuation. In line with what I have attempted here, I also encourage future scholarship to be attuned to how international students' and graduates'

realities, experiences, and choices are enabled and constrained by the visa policies that shape this context. Moreover, future researchers might explore how graduates encounter broader discourses regarding citizenship and belonging, particularly that of the "skilled migrant." What types of messages are they receiving and from whom? How do they make sense of their own lives and trajectories within these discourses?

Thinking ecologically: the continued role of home contexts

Although the ways graduates experienced their relationships with family and friends in their home countries was not the focus of this dissertation, the stories participants shared about these relationships were particularly moving. Their stories point to opportunities for future research to examine how these relationships evolve as students prepare for and pursue schooling and work beyond their home countries. Such research could focus on these relationships and experiences from the student perspective, the parent perspective, or both. Approaches incorporating parent *and* student voices would be a particularly welcome addition to the scholarship on international students.

Furthermore, future research might explore how considerations of students' home contexts persist in shaping graduates' interpretations of their present experiences and plans for the future. Like research agendas that explore graduates' evolving relationships with loved ones after embarking on education and work abroad, scholars could invest in trying to account for how international students and graduates perceive their experiences of connection to and belonging within elements of their home context. For instance, how might feelings of affinity or connection to their country of origin shape their experiences and decisions to study or work internationally? How might policies intended to entice mobile students to return home after completing their degrees abroad be interpreted by and factored into the experiences and

170

decisions of these graduates? Finally, this study explored the experiences of graduates who navigated the study to work transition in the United States with (initial) intentions to stay beyond OPT. As millions of graduates return home after completing their studies, more research is needed to determine how these individuals navigate their transition to life and working at home, after spending so many of their formative years, living, studying, working, and forming professional and personal relationships in the United States.

Final Thoughts

As I type this last section, I cannot help but feel a sense of incompletion. There is still much more to learn, and even more to be done. Beyond the implications for research contained in the second half this chapter, a significant amount of work remains to better serve transnational student populations given the complex realities that they must navigate. In an interconnected world, HEIs play a monumental role in facilitating mobilities, connections, and opportunities for and among people. Tremendous benefits, responsibilities, and challenges are implicated in this role. It is my hope that HEIs will take this role seriously and commit to better understanding student experiences so they might engage and serve them more effectively and equitably. Given the ways visa policies play into students'/graduates' experiences, this responsibility requires both (1) empowering stakeholders to improve experiences and promote success given the current policy reality and (2) advocating for policies (such as those presented in the preceding chapter) that are more just and humanizing. Taking a critical policy approach as a future scholar-practitioner, I take seriously my role and look forward to engaging the field across these multiple dimensions.

APPENDIX

Appendix A. Participant Information

Table 1

Participant Information

Pseudonym	Home Country	Major	Degree Level	Employer Info	Years in USA
Casey	Malaysia	Chemistry	PhD	Lab director at University in Michigan	10
David	Venezuela	Engineering	Bachelors	Engineer at Parts Manufacturer in Michigan	5
Dhara	India	construction Design	Masters	Project manager at Construction Company in Michigan	3
Emma	New Zealand	Engineering	Bachelors	Engineer at Design Contractor in Michigan	7
Gabe	India	Engineering	Masters	Engineer at Construction Design Company in Michigan	4
Ida	Iran	Chemistry	PhD	Science Educator at University in Michigan	9
Jian	China	Math	Bachelors	Marketing Analyst at contractor in Michigan	6
Kai	China	Engineering	PhD	Engineer at Automotive Manufacturer in Michigan	14
Xiaoyi	China	Digital Communications	Masters	Designer at Startup in California	3

REFERENCES

REFERENCES

Altbach, P. G. (1998). The Foreign Student Dilemma. In *Comparative Higher Education: Knowledge, the University, and Development* (pp. 161-174). Westport, CT: Praeger.

Altbach, P. G., & Knight, J. (2007). The Internationalization of higher education: Motivations and realities. *Journal of Studies in International Education, 11*(3-4), 290-305. doi:10.1177/1028315307303542

Anderson, S. (2017). International students and STEM OPT. *National Foundation for American Policy*. Retrieved from http://nfap.com/wp-content/uploads/2017/10/International-Students-and-STEM-OPT.NFAP-Policy-Brief.October-2017.pdf.

Anderson, S. (2017, October 16). Are international students next on the menu? Retrieved from https://www.forbes.com/sites/stuartanderson/2017/10/15/are-international-students-next-on-the-menu/#7e16c2cc5e9f.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469-480.

Balin, E., Anderson, N., Chudasama, S., Kanafasingam, S., & Zhang, L. (2016). Working with international students in the U.S. and Beyond: A summary of survey research by NCDA international student services committee. *Journal of International Students, 6*(4), 1053-1062.

Balmer, B., Godwin, M., & Gregory, J. (2009). The Royal Society and the 'brain drain': Natural scientists meet social science. *Notes and Records of the Royal Society, 63*(4), 339-353. doi:10.1098/rsnr.2008.0053

Baruch, Y., Budhwar, P. S., & Khatri, N. (2007). Brain drain: Inclination to stay abroad after studies. *Journal of World Business, 42*(1), 99-112. doi:10.1016/j.jwb.2006.11.004

Basch, L. G., Schiller, N. G., & Blanc, C. S. (1994). *Nations unbound: Transnational projects, postcolonial predicaments and deterritorialized nation-states*. London: Routledge.

Beelen, J., & Jones, E. (2015). Redefining internationalization at home. *The European Higher Education Area,* 59-72. doi:10.1007/978-3-319-20877-0_5

Bluestein, T., Amelink, C., & Aetiles, M. (2018). Campus Climate for Engineering Graduate Students: Examining Differences Between Domestic Minority, Domestic Majority, and International Students. In *The Collaborative Network for Engineering and Computing Diversity Conference*. Crystal City, VA.

Briggs, P., & Ammigan, R. (2017). A Collaborative Programming and Outreach Model for International Student Support Offices. *Journal of International Students*, *7*(4), 1080–1095. https://doi.org/10.32674/jis.v7i4.193

Bronfenbrenner, U., & Fischer, K. W. (1993). The ecology of cognitive development: Research models and fugitive findings. In R. H. Wozniak (Ed.), *The Jean Piaget symposium series. Development in context: Acting and thinking in specific environments* (pp. 3-44). Hillsdale, NJ: Lawrence Erlbaum Associates.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge - Mass. & London: Harvard University Press.

Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nuture reconceptualized in developmental perspective: A bioecological model. *Psychological Review, 101*(4), 568-586. doi:10.1037/0033-295x.101.4.568

Bronfenbrenner, U. (Ed.). (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks: Sage Publications.

Cantwell, B., & Maldonado-Maldonado, A. (2009). Four stories: Confronting contemporary ideas about globalisation and internationalisation in higher education. *Globalisation, Societies and Education, 7*(3), 289-306. doi:10.1080/14767720903166103

Cantwell, B. (2011). Transnational mobility and international academic employment: Gatekeeping in an academic competition arena. *Minerva, 49*(4), 425-445. doi:10.1007/s11024-011-9181-3

Cantwell, B. (2015). Are international students cash cows? Examining the relationship between new international undergraduate enrollments and institutional revenue at public colleges and universities in the US. *Journal of International Students, 5*(4), 512-525.

Cao, X. (1996). Debating 'brain drain' in the context of globalisation. *Compare: A Journal of Comparative and International Education, 26*(3), 269-285. doi:10.1080/0305792960260303

Chen, M. (2019). *Essays on the Economics of International Students in Us Higher Education* (dissertation). ProQuest Dissertations & Theses, Ann Arbor.

Chen, Y., & Ross, H. (2015). "Creating a Home away from Home": Chinese Undergraduate Student Enclaves in US Higher Education. *Journal of Current Chinese Affairs*, *44*(3), 155–181. https://doi.org/10.1177/186810261504400307

Clandinin, D. J., & Connelly, F. M. (2004). *Narrative inquiry: Experience and story in qualitative research*. San Francisco: Jossey-Bass.

Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. Los Angeles: Sage.

Crowther, P., Joris, M., Ottis, M., Nilsson, B., Teekens, H., & Wachter, B. (2000). Internationalisation at Home A position paper. *European Association for International Education*. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.123.3826&rep=rep1&type=pdf

Eder, J., Smith, W. W., & Pitts, R. E. (2010). Exploring factors influencing student study abroad destination choice. *Journal of Teaching in Travel & Tourism, 10*(3), 232-250. doi:10.1080/15313220.2010.503534

Elliot, D. L., Reid, K., & Baumfield, V. (2015). Beyond the amusement, puzzlement and challenges: An enquiry into international students' academic acculturation. *Studies in Higher Education, 41*(12), 2198-2217. doi:10.1080/03075079.2015.1029903

Ellison, S. (2014). Attack of the cyborgs: Economic imperialism and the human deficit in educational policy-making & research. *Journal of Education Controversy, 8*(7), 1-15.

Findlay, A. M. (2010). An Assessment of Supply and Demand-side Theorizations of International Student Mobility. *International Migration, 49*(2), 162-190. doi:10.1111/j.1468-2435.2010.00643.x

Finlay, L. (2008). A Dance Between the Reduction and Reflexivity: Explicating the "Phenomenological Psychological Attitude". *Journal of Phenomenological Psychology, 39*(1), 1-32. doi:10.1163/156916208x311601

Finlay, L. (2013). Unfolding the phenomenological research process. *Journal of Humanistic Psychology, 53*(2), 172-201. doi:10.1177/0022167812453877

Fischer, K. (2021, January 29). *Biden's Plan to Help International Students Stay After Graduation Could Help Recruit Them in the First Place*. Chronical of Higher Education. https://www.chronicle.com/article/bidens-plan-to-help-international-students-stay-after-graduation-could-help-recruit-them-in-the-first-place?cid2=gen_login_refresh&cid=gen_sign_in.

Fong, V. (2011). *Paradise redefined: transnational Chinese students and the quest for flexible citizenship in the developed world*. Stanford University Press.

Friesen, N., Henriksson, C., & Saevi, T. (2012). *Hermeneutic phenomenology in education: Method and practice*. Rotterdam: Sense.

Gadamer, H. (1960). *Truth and method*. London: Bloomsbury Academic.

Gesing, P., & Glass, C. (2019). STEM student mobility intentions post-graduation and the role of reverse push-pull factors. *International Journal of Educational Development, 65*, 227-236. doi:10.1016/j.ijedudev.2018.08.008

Giorgi, A. (1975). An application of phenomenological method in psychology. *Duquesne Studies in Phenomenological Psychology, 2*, 82-103. doi:10.5840/dspp197529

Gribble, C. (2008). Policy options for managing international student migration: The sending countrys perspective. *Journal of Higher Education Policy and Management, 30*(1), 25-39. doi:10.1080/13600800701457830

Grimm, A. (2019). Studying to stay: Understanding graduate visa policy content and context in the United States and Australia. *International Migration*. doi:10.1111/imig.12561

Grinyer, A., & Thomas, C. (2012). The value of interviewing on multiple occasions or longitudinally. *The SAGE Handbook of Interview Research: The Complexity of the Craft,* 219-230. doi:10.4135/9781452218403.n15

Han, X., & Appelbaum, R. (2016). Stay or Go Home? International STEM Students in the United States are Up for Grabs after Graduation. *SSRN Electronic Journal*. doi:10.2139/ssrn.2859877

Harris, J., & Turado, M. (1970). Migration, unemployment and development: A two-sector analysis. *The American Economic Review, 60*(1), 126-142.

Hawthorn, L. (2013). Designer immigrants? Outcomes from the study-migration pathway in Australia, Canada, New Zealand and Switzerland. In *Twenty-first International Metropolis Conference*. Tampere, Finland.

Hawthorne, L. (2010). How valuable is "Two-Step Migration"? Labor market outcomes for international student migrants to Australia. *Asian and Pacific Migration Journal, 19*(1), 5-36. doi:10.1177/011719681001900102

Heidegger, M. (1927). *Being and time*. United States: Stellar Books.

Henriksson, C., & Friesen, N. (2012). Introduction. In N. Friesen, C. Henriksson, & T. Saevi (Eds.), *Hermeneutic phenomenology in education* (Vol. 4, pp. 1-16). Boston, MA: Sense Publishing.

Herman, A. (2018). America's High-Tech STEM Crisis. *Forbes*. Retrieved from https://www.forbes.com/sites/arthurherman/2018/09/10/americas-high-tech-stem-crisis/#3e74ce1ff0a2

Herzog, S. (2012). *The third culture: Exploring the experiences of international graduate assistants at a public, four-year institution in the United States* (Doctoral dissertation,

University of Nebraska- Lincoln). Digital Commons.
https://digitalcommons.unl.edu/cehsedaddiss/95/

Institute of International Education. (2018). International Students. Retrieved from
https://www.iie.org/Research-and-Insights/Open-Doors/Data/International-Students

Jacobs, E. (2020). The homogenizing and diversifying effects of migration policy in the
internationalization of higher education. *Higher Education*.
https://doi.org/10.1007/s10734-020-00658-4

Kato, T., & Sparber, C. (2013). Quotas and Quality: The Effect of H-1B Visa Restrictions on the
Pool of Prospective Undergraduate Students from Abroad. *Review of Economics and
Statistics*, *95*(1), 109–126. https://doi.org/10.1162/rest_a_00245

Kim, J. (2016). *Understanding narrative inquiry: The crafting and analysis of stories as
research*. Los Angeles: SAGE.

King, R., & Raghuram, P. (2012). International student migration: Mapping the field and new
research agendas. *Population, Space and Place, 19*(2), 127-137. doi:10.1002/psp.1746

Knight, J. (2011). Five Myths about Internationalization. *International Higher Education,* (62).
doi:10.6017/ihe.2011.62.8532

Knight, J. (2015). Updated Definition of Internationalization. *International Higher Education,*
(33). doi:10.6017/ihe.2003.33.7391

Langdon, D., McKittrick, G., Beede, D., Khan, B., & Doms, M. (2011). STEM: Good jobs now
and for the future. *U.S. Department of Commerce Economics and Statistics
Administration*. Retrieved from https://files.eric.ed.gov/fulltext/ED522129.pdf.

Laws, K., & Ammigan, R. (2020). International Students in the Trump Era. *Journal of
International Students*, *10*(3), xviii-xxii. https://doi.org/10.32674/jis.v10i3.2001

Le, T., & Gardner, S. K. (2010). Understanding the doctoral experience of Asian international
students in the science, technology, engineering, and mathematics (STEM) fields: An
exploration of one institutional context. *Journal of College Student Development, 51*(3),
252-264. doi:10.1353/csd.0.0127

Lee, E. S. (1966). A Theory of Migration. *Demography, 3*(1), 47. doi:10.2307/2060063

Lee, J. J., & Rice, C. (2007). Welcome to America? International student perceptions of
discrimination. *Higher Education, 53*(3), 381-409. doi:10.1007/s10734-005-4508-3

Lee, J. J. (2008). Beyond borders: International student pathways to the United States. *Journal of
Studies in International Education, 12*(3), 308-327. doi:10.1177/1028315307299418

Lee, J. J., & Kim, D. (2009). Brain gain or brain circulation? U.S. doctoral recipients returning to South Korea. *Higher Education, 59*(5), 627-643. doi:10.1007/s10734-009-9270-5

Lee, J. (2015). International Student Experiences: Neo-Racism and Discrimination. *International Higher Education,* (44). doi:10.6017/ihe.2006.44.7916

Lewin, A. Y., Massini, S., & Peeters, C. (2009). Erratum: Why are companies offshoring innovation? The emerging global race for talent. *Journal of International Business Studies, 40*(8), 1406-1406. doi:10.1057/jibs.2009.64

Lewis-Beck, M. S., Bryman, A., & Liao, T. F. (2004). Humanism and humanistic research. In *The SAGE Encyclopedia of Social Science Research Methods*.

Li, Z. (2012). A critical account of employability construction through the eyes of Chinese postgraduate students in the UK. *Journal of Education and Work, 26*(5), 473-493. doi:10.1080/13639080.2012.710740

Lin, Y., & Flores, L. Y. (2011). Job Search Self-Efficacy of East Asian International Graduate Students. *Journal of Career Development, 40*(3), 186-202. doi:10.1177/0894845311418655

Liu, X. (2009). *<i>Examining the impact of international graduate students acculturation experiences on their career decision-making self-efficacy</i>* (Unpublished doctoral dissertation, 2009). University of North Carolina at Greensboro.

Mack, L. (2010). The philosophical underpinnings of educational research. *Polyglossia, 19*, 5-11.

Malkin, M. (2015). *Sold out: How high-tech billionaires & bipartisan beltway crapweasels are screwing Americas best & brightest workers*. New York: Threshold Editons/Mercury Ink.

Manen, M. V. (1997). *Researching lived experience: Human science for an action sensitive pedagogy*. London: The Althouse Press.

Manen, M. V. (2012). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. London: Routledge.

Marginson, S., & Rhoades, G. (2002). Beyond national states, markets, and systems of higher education: A glonacal agency heuristic. *Higher Education, 43*(3), 281-309.

Mayr, K., & Peri, G. (2009). Brain Drain and Brain Return: Theory and Application to Eastern-Western Europe. *The B.E. Journal of Economic Analysis & Policy, 9*(1). doi:10.2202/1935-1682.2271

Mazzarol, T., & Sourar, G. (2002). "Push-pull" factors influencing international student destination choice. *International Journal of Education Management, 16*(2), 82-90. doi:https://doi.org/10.1108/09513540210418403

Mcfadden, A., & Seedorff, L. (2017). International student employment: Navigating immigration regulations, career services, and employer considerations. *New Directions for Student Services, 2017*(158), 37-48. doi:10.1002/ss.20218

Mcfadden, A., & Seedorff, L. (2017). International student employment: Navigating immigration regulations, career services, and employer considerations. *New Directions for Student Services, 2017*(158), 37-48. doi:10.1002/ss.20218

McMahon, M. E. (1992). Higher education in a world market. *Higher Education, 24*(4), 465-482.

McMahon, M. (2017). *Career counselling: Constructivist approaches*. Abingdon, Oxon: Routledge.

Medendorp, J. W. (2015). *<i>Migration and motivation: An analysis of motivation for return to country of origin among foreign-trained Chinese PhDs</i>* (Unpublished doctoral dissertation, 2015). Michigan State University.

Merleau-Ponty, M. (1976). *The primacy of perception and other essays on phenomenological psychology, the philosophy of art, history and politics*. New York.

Miano, J. (2017). A history of the 'optional practical training' guestworker program. *Center for Immigration Studies*. Retrieved from https://cis.org/Report/History-Optional-Practical-Training-Guestworker-Program.

Monahan, J. L. (2018). *Starting a career in the U.S.: International student perceptions of the Optional Practical Training experience* (Doctoral dissertation, University of Missouri-Columbia). Proquest.

Murphy, K. A., Blustein, D. L., Bohlig, A. J., & Platt, M. G. (2010). The College-to-Career Transition: An Exploration of Emerging Adulthood. *Journal of Counseling & Development, 88*(2), 174-181. doi:10.1002/j.1556-6678.2010.tb00006.x

NAFSA. (2017). Possible Changes Under Draft Executive Orders: Revising the F-1 Student Regulations. Retrieved from https://www.nafsa.org/Professional_Resources/Browse_by_Interest/International_Students_and_Scholars/Possible_Changes_Under_Draft_Executive_Orders__Revising_the_F-1_Student_Regulations/

NAFSA. (2018). STEM OPT WashTech Litigation. Retrieved from https://www.nafsa.org/Professional_Resources/Browse_by_Interest/International_Students_and_Scholars/STEM_OPT_WashTech_Litigation/

Nelson, L. J., Badger, S., & Wu, B. (2004). The influence of culture in emerging adulthood: Perspectives of Chinese college students. *International Journal of Behavioral Development, 28*(1), 26-36. doi:10.1080/01650250344000244

Ng, E. S., & Burke, R. J. (2006). The next generation at work – business students views, values and job search strategy. *Education Training, 48*(7), 478-492. doi:10.1108/00400910610705872

NSF. (2018). Higher education in science and engineering. Retrieved from https://www.nsf.gov/statistics/2018/nsb20181/report/sections/higher-education-in-science-and-engineering/graduate-education-enrollment-and-degrees-in-the-united-states

OECD. (2013). Education indicators in focus. Retrieved from https://www.oecd.org/education/skills-beyond-school/EDIF 2013--N°14 (eng)-Final.pdf

Page, A. G. (2019). Ethnic enclaves transcending space Chinese international students' social networks in a European University town. *Asian Ethnicity*, *20*(4), 418–435. https://doi.org/10.1080/14631369.2019.1570816

Pellegrino, A. (2001). Trends in Latin American skilled migration: "brain drain" or "brain exchange"? *International Migration, 39*(5), 111-132. doi:10.1111/1468-2435.00174

Rabionet, S. E. (2011). How I learned to design and conduct semi-structured interviews: An ongoing and continuous journey. *The Qualitative Report, 16*(2), 563-566.

Redden, E. (2016). U.S. extends work program for some international students. Retrieved from https://www.insidehighered.com/news/2016/03/11/us-extends-work-program-some-international-students

Renn, K. A., & Arnold, K. D. (2003). Reconceptualizing Research on College Student Peer Culture. *The Journal of Higher Education, 74*(3), 261-291. doi:10.1080/00221546.2003.11780847

Robertson, S. (2013). *Transnational student migrants and the state the education-migration nexus*. Palgrave, UK .

Robertson, S., & Runganaikaloo, A. (2013). Lives in limbo: Migration experiences in Australia's education–migration nexus. *Ethnicities, 14*(2), 208-226. doi:10.1177/1468796813504552

Robertson, S. L. (2006). Brain drain, brain gain and brain circulation. *Globalisation, Societies and Education, 4*(1), 1-5. doi:10.1080/14767720600554908

Rose-Redwood, C. A., & Rose-Redwood, R. (2017). Rethinking the Politics of the International Student Experience in the Age of Trump. *Journal of International Students*, *7*(3). https://doi.org/10.32674/jis.v7i3.201

Ruiz, N. G., & Budiman, A. (2018, September 18). Increase in Foreign Student Graduates Staying and Working in U.S. Retrieved from http://www.pewglobal.org/2018/05/10/number-of-foreign-college-students-staying-and-working-in-u-s-after-graduation-surges/

Sá, C. M., & Sabzalieva, E. (2018). The politics of the great brain race. *Higher Education*, 75, 231–253

Sahoo, A. K., Sangha, D., & Kelly, M. (2010). From 'temporary migrants' to 'permanent residents': Indian H-1B visa holders in the United States. *Asian Ethnicity*, *11*(3), 293–309. https://doi.org/10.1080/14631369.2010.510872

Sanders, M. (2009). STEM, STEM education, STEMmania. *The Technolody Teacher,* 20-26. Retrieved from https://vtechworks.lib.vt.edu/bitstream/handle/10919/51616/STEMmania.pdf?sequence.

Shadowen, N. L., Williamson, A. A., Guerra, N. G., Ammigan, R., & Drexler, M. L. (2019). Prevalence and Correlates of Depressive Symptoms Among International Students:

Implications for University Support Offices. *Journal of International Students*, *9*(1), 129–149. https://doi.org/10.32674/jis.v9i1.277

Shanka, T., Quintal, V., & Taylor, R. (2006). Factors influencing international students choice of an education destination–A correspondence analysis. *Journal of Marketing for Higher Education, 15*(2), 31-46. doi:10.1300/j050v15n02_02

She, Q., & Wotherspoon, T. (2013). International student mobility and highly skilled migration: A comparative study of Canada, the United States, and the United Kingdom. *SpringerPlus, 2*(1). doi:10.1186/2193-1801-2-132

Shen, Y., & Herr, E. L. (2004). Career placement concerns of international graduate students: A qualitative study. *Journal of Career Development, 31*(1), 15-29. doi:10.1177/089484530403100102

Sherk, J., & Nell, G. L. (2008). *More H-1B visas, more American jobs, a better economy*. Washington, DC: Heritage Foundation.

Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations, 35*(6), 699-713. doi:10.1016/j.ijintrel.2011.08.004

Song, H. (1997). From brain drain to reverse brain drain: Three decades of Korean experience. *Science, Technology and Society, 2*(2), 317-345. doi:10.1177/097172189700200206

Soria, K. M., & Troisi, J. (2013). Internationalization at home alternatives to study abroad. *Journal of Studies in International Education, 18*(3), 261-280. doi:10.1177/1028315313496572

Stark, O., Helemenstein, C., & Prskawetz, A. (1997). A brain gain with a brain drain. *Economic Letters, 55*(2), 227-234. Retrieved from https://econpapers.repec.org/article/eeeecolet/v_3a55_3ay_3a1997_3ai_3a2_3ap_3a227-234.htm.

Stiwne, E. E., & Jungert, T. (2010). Engineering students' experiences of transition from study to work. *Journal of Education and Work, 23*(5), 417-437. doi:10.1080/13639080.2010.515967

Sutter, B., & Jandl, M. (2006). Comparative study on policies towards foreign graduates study on admission and retention policies towards foreign students in industrialised countries. *International Center for Migration Policy Development*. Retrieved from http://www.net4you.com/jandlftp/Students_Final.pdf

Syed, M. (2015). Emerging Adulthood: Developmental stage, theory, or nonsense? In J. J. Arnett (Ed.), *The Oxford Handbook of Emerging Adulthood* (pp. 11-25). Oxford University Press.

Syed, M., & Mitchell, L. L. (2013). Race, Ethnicity, and Emerging Adulthood. *Emerging Adulthood, 1*(2), 83-95. doi:10.1177/2167696813480503

Szelényi, K. (2006). Students without borders? Migratory decision-making among international graduate students in the U.S. *Knowledge, Technology & Policy, 19*(3), 64-86. doi:10.1007/s12130-006-1030-6

Tan, A. (2015). College Choice Behaviors of International Students. *SAGE Open, 5*(4), 215824401561899. doi:10.1177/2158244015618995

Thomas, R. M. (2005). *Comparing theories of child development*. Belmont, CA: Wadsworth.

Tran, L. T., Phan, H. L., Tan, G., & Rahimi, M. (2020). 'I changed my strategy and looked for jobs on Gumtree': the ecological circumstances and international graduates' agency and strategies to navigate the Australian labour market. *Compare: A Journal of Comparative and International Education*, 1–19. https://doi.org/10.1080/03057925.2020.1837613

Tremblay, K. (2005). Academic mobility and immigration. *Journal of Studies in International Education, 9*(3), 196-228. doi:10.1177/1028315305277618

US Department of State. (2019). Student visa. Retrieved April 22, 2019, from https://travel.state.gov/content/travel/en/us-visas/study/student-visa.html

USCIS. (2018, September 04). Students and Employment. Retrieved from https://www.uscis.gov/working-united-states/students-and-exchange-visitors/students-and-employment

Vertovec, S. (1999). Conceiving and researching transnationalism. *Ethnic and Racial Studies, 22*(2), 447-462. doi:10.1080/014198799329558

Wadhwa, R. (2015). Students on the move. *Higher Education for the Future, 3*(1), 54-75. doi:10.1177/2347631115610221

Ward, C., & Geeraert, N. (2016). Advancing acculturation theory and research: The acculturation process in its ecological context. *Current Opinion in Psychology, 8*, 98-104. doi:10.1016/j.copsyc.2015.09.021

Waters, J., Brooks, R., & Waters, J. (2012). Transnational spaces, international students: Emergent perspectives on educational mobilities (A. Fuller, Ed.). In R. Brooks (Ed.), *Changing Spaces of Education: New Perspectives on the Nature of Learning* (pp. 21-38). Routledge.

Wildavsky, B. (2012). *The great brain race: How global universities are reshaping the world*. Princeton, NJ: Princeton University Press.

Yorke, M. (2007). Employability in higher education: What it is - what it is not. *The Higher Education Academy*. Retrieved from https://www.heacademy.ac.uk/knowledge-hub/employability-higher-education-what-it-what-it-not.

Zhao, C.-M., Kuh, G. D., & Carini, R. M. (2005). A Comparison of International Student and American Student Engagement in Effective Educational Practices. *The Journal of Higher Education*, *76*(2), 209–231. https://doi.org/10.1080/00221546.2005.11778911

Zhang, Y. L. (2016). International students in transition: Voices of Chinese doctoral students in a US research university. *Journal of International Students, 6*(1), 175-194.

Ziguras, C., & Gribble, C. (2014). Policy responses to address student "brain drain". *Journal of Studies in International Education, 19*(3), 246-264. doi:10.1177/1028315314561121

Zweig, D. (2006). Competing for talent: Chinas strategies to reverse the brain drain. *International Labour Review, 145*(1-2), 65-90. doi:10.1111/j.1564-913x.2006.tb00010.x