The Politics of Mobility: Study Abroad in an Era of Climate Change

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The Politics of Mobility: Study Abroad in an Era of Climate Change

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May 2020

Advised by José Perillán and Joseph Nevins

Submitted to the Faculty of Vassar College in Partial Fulfillment of the Requirements for the Degree of Bachelor of the Arts in Science, Technology, and Society
ABSTRACT

This paper explores the fundamental tension between mobility and the environmental consequences of the transportation that allows for that movement, zeroing in on the paradox of studying abroad in order to learn about climate or environmental sciences. With this, I consider what makes students feel justified in participating in such programs, whether the perceived benefits of these experiences outweigh the environmental costs, and how these programs play into the larger discourse of sustainability and tourism. By framing travel —air travel in particular— as technology embedded with political and cultural ideals, I analyze how and why concepts of mobility influence student choices, as well as how these tensions are navigated by its participants. Through exploring the history and objectives of these types of travel-intensive programs in conjunction with the historical purposes of travel and study abroad, considering the climate impact of air travel, and relating concepts of “Academic Flying” to study abroad, I question why students feel entitled to the privilege of embarking on such an environmentally detrimental journey, and whether such programs should even exist. My research culminates in surveying over 200 School for International Training (SIT) and School for Field Studies (SFS) study abroad alumni about how the climate impact of their travel abroad impacted their decision to participate in their program, whether or not they discussed or thought about their climate impact over the course of the semester, as well as how they would respond to criticism regarding travel for the purpose of discussing climate change. I conclude that the choice is messy; while the benefits of these study abroad experiences may outweigh the environmental costs of the travel required, this is not always the case. With this, students engage in a level of somnambulism, where they fail to question the concept of study abroad and think critically about the potential repercussions of their actions. This can in part be attributed to the social and cultural capital that travel promises, and the lack of reflexivity promoted by both study abroad organizations and students’ home institutions.
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ACKNOWLEDGEMENTS

As my senior year and time at Vassar comes to a close, I am finding it especially important to thank those who have provided their time and support along the way. What started as a relatively modest idea ("wow, wouldn’t it be cool if I was able to hear from students? I bet I could rally together at least twenty responses...") quickly grew into a much bigger and more meaningful project than I had initially anticipated. None of this would have been possible without the help of the incredible team of people who were there for me at every step of the way.

First and foremost, thank you to José Perillán for your unwavering support as one of my thesis readers. I walked away from every one of our conversations with a clearer idea of what exactly this project was about and where I wanted to take it. I appreciate how you encouraged me to think deeper while simultaneously reminding me to slow down when I started getting ahead of myself. Your input has been so valuable and this finished product would not be what it is today had you not been there to guide me.

Thank you also to Joe Nevins, my second thesis reader. You have been an incredible resource for me throughout this entire process, and I am forever grateful for the book and article recommendations you have always been so willing and eager to share with me. Your work was among the first few resources I encountered in my initial research, and in many ways inspired this topic and helped shape my own writing.

Special thanks also to my major advisor M. Mark. You welcomed me into the STS department with open arms and have been so supportive of me over the past few years. I remember sitting in your office discussing my plans to study abroad over two years ago — who knew that decision would lead to so much more!

I would also like to recognize The School for Field Studies for going above and beyond in making this project possible. Amy Barkhouse, Mark Seifert, and Sophia Graybill worked some serious magic to include my research questions into the organization’s program evaluations, as well as send me a breakdown of the data they collected. I remain inspired by SFS’s own efforts to think critically about how to provide students with more sustainable study abroad options and hope this project can shed some light on how and why to move forward with those plans.

Many thanks also to The School for International Training. Zufan Hagos, Nicolas Stahelin, Anna Gail Caunca, and Carla Lineback came together to help me distribute my student survey to IHP alumni, and for that I am so appreciative. With this, I would also like to thank everyone who made my own SIT IHP experience possible. It is one that I look back on often and am always so grateful for.

I also owe a huge thank you to the SFS and SIT students who were willing to engage and who provided me with some incredibly well-thought-out and passionately written material to work with. I was blown away by what everyone had to say and saw a little bit of myself woven into each and every response.

Last, but certainly not least, thank you to my family for their endless love and support. As always, it seems that everyone had a role to play, even in this thesis. Thank you to my brother Oliver for building spreadsheets for me and taking the time to teach me how to link graphs in Google Docs. Thank you to my mom for lending me her statistical analysis expertise and helping me organize data. And finally, thank you to my dad, who by now has read hundreds of pages of my writing. You are the best editor I could ask for.
INTRODUCTION

36,000 miles. A distance as arbitrary as any other until you put it into perspective. 36,000 miles will take you to the top of Mount Everest almost 6,548 times. 36,000 miles will take you to the deepest point of the Mariana Trench more than 5,142 times. 36,000 miles will take you 1.4 times around Earth’s equator. 36,000 miles will take you 15% of the way to the surface of the moon. While these statistics successfully reinforce our understanding of precisely how far 36,000 miles is, they also evoke a host of other questions that are less easily answered.

Exactly one year ago I was in the midst of completing a whirlwind study abroad semester that traveled from San Francisco, to Vietnam, Morocco, and Bolivia. Over the course of one semester, or 113 days, our group of thirty-two students, one traveling professor, and one staff member each covered approximately 36,000 miles as we quite literally journeyed around the world. Of the 35,734 total miles, 29,378 miles were completed on our fourteen group flights; ultimately each student and staff member would board approximately sixteen flights, as transportation to the starting point in San Francisco and home from the ending point in Washington, D.C were to be completed individually, and most participants lived far enough from San Francisco and Washington D.C. to warrant another two flights. The remaining 3,203 miles of the group total were traveled within each country by car, bus, van, motorbike, or train. In addition to our travel from country to country, our group migrated within each country from city to city, packing up and leaving on average every five or six days to move on to the next stop on our itinerary.¹

¹ See Appendix A for itinerary and travel miles information
Compared to the average American, who drives about 13,476 miles a year,\(^2\) the amount that we traveled within the span of only a few months is astronomical. “So what!” you might be thinking. “That’s a lot of travel, but why exactly does it matter?” It’s true; people travel every year for school, work, family, and pleasure. We by no means set any world records or achieved anything extraordinary during our semester abroad. In fact, that kind of a lifestyle might be the norm for millions of people on the planet. But what sets us apart is that the purpose of our studies was to learn about climate change. And in doing so, our air travel alone produced about 10.5 metric tons of Carbon emissions,\(^3\) just 6.1 tons short of the amount of Carbon emissions the average American produces in an entire year.\(^4\)

The irony of the situation is very real and, to be completely candid, extremely disturbing. As students, we were all acutely aware of the purpose of our studies; the program was titled “Climate Change: The Politics of Food, Water, and Energy”, and all four of the academic courses were directly related to environmental studies and climate change research. Thus, everyone who enrolled was either majoring in environmental sciences at their respective institutions, or using the credits for another part of their graduation requirements. In this case, they at least had an interest in, or in some cases even a passion for, learning about climate change and the environment. Additionally, the travel portion could not be easily ignored; a prime selling-point of the semester, it is what sets this particular program apart from almost every other type of study abroad experience offered. It is hard to believe that through the process of deciding on, applying

\(^2\) “Annual Average Miles per Driver by Age Group,” U.S. Department of Transportation, Federal Highway Administration, March 29, 2018, [https://www.fhwa.dot.gov/ohim/onh00/bar8.htm](https://www.fhwa.dot.gov/ohim/onh00/bar8.htm).

\(^3\) See Appendix B for emissions graph provided by SIT

for, and committing to a program, as well as completing the logistical pieces of acquiring visas, renewing passports, making appointments for immunizations, filling out paperwork, and packing, students didn’t think about or acknowledge the potentially problematic nature of the semester they were about to embark on. It is without a doubt, that as students with at least some knowledge of, and concern about, climate change, we were fully aware of the environmental consequences of our travel, yet still decided to participate. The question, then, is how and why each individual made the decision to enroll in a semester abroad that, from an environmental perspective, so clearly goes against everything we are taught about sustainable living and travel.

Not only is this topic relevant to my own personal life, but also to the current cultural and political climate, especially within recent years. Climate change has become a focal point of the global news, establishing itself as one of the biggest threats nations will face during the 21st century, and drawing increasing attention from the media, political leaders, celebrities, and the public. Most recently, 17-year-old Swedish environmental activist Greta Thunberg was named Time Magazine’s 2019 Person of the Year due to her commitment to the environment and demand for policies and change that reflects that commitment. What started in 2018 as skipping school in order to strike outside of the Swedish Parliament slowly but surely snowballed into something much larger. The Fridays for Future movement was born, and by the end of 2018, “tens of thousands of students across Europe began skipping school on Fridays to protest their own leaders’ inaction,”5 joining Thunberg in her demands for change. Less than a year later, these climate strikes had spread beyond northern Europe, truly blossoming into a global movement. In March of 2019, Thunberg “led more than 1 million students around the world as

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they walked out of Friday classes to protest inaction on climate change.”

She has been nominated for the Nobel Peace Prize and addressed the United Nations, U.S. Congress, and UK Parliament, making sure to minimize her carbon footprint as she travels; Thunberg refuses to fly, preferring to travel by train. Instead of getting to the UN Climate Action Summit in New York in September 2019 by plane, she crossed the Atlantic on a ship run on wind, solar power, and underwater turbines. Later that month, 4 million people across 161 countries joined her strike, successfully making it the largest climate demonstration in history.

Clearly, climate change is a ‘hot topic’ that has drawn the attention of many. Time Magazine editors described how Thunberg "has succeeded in creating a global attitudinal shift, transforming millions of vague, middle-of-the-night anxieties into a worldwide movement calling for urgent change." Not only have people become more vocal about their beliefs and turned up in larger numbers than ever to participate in protests and strikes, but it seems that some may have even made changes that have produced tangible results. For example, in 2019, Sweden saw a “4% drop in the number of people flying via its airports, a rare decrease in recent years for a European country,” and domestic air travel decreased 9%. Germany, too, has seen a decline in domestic air travel; November 2019 was the fourth straight month demonstrating declines in commercial aircraft passengers, with a 12% decrease from the year before. With this,
Deutsche Bahn, the German rail operator, has reported record passenger numbers.\textsuperscript{12} Given the current COVID-19 social distancing and travel recommendations that began in March of 2020, it is difficult to determine whether declines in total air passengers due to these kinds of attitudinal shifts would have continued; in light of the pandemic, airlines have cancelled thousands of flights, many states and countries have restricted travel, and some have even closed their borders. As a result, commercial aircraft passenger data has already been, and will continue to be impacted as the governments, as well as the public, navigate this public health crisis.

With this have come debates over what has caused the previously mentioned declines in commercial aircraft passenger numbers. In considering the falling domestic air travel rates in Germany, for example, some cite the declining German economy and others point out that the trade conflict between the United States and China has led to fewer passengers on domestic flights in Germany that typically connect travelers to key markets in Asia.\textsuperscript{13} While there are of course many factors that play into these numbers and it is likely too early to make any solid conclusions about potential causes, an increasingly apparent sense of “flight shame”, generally defined as “the growing stigma against leaving a large carbon footprint,”\textsuperscript{14} seems to have inspired many travelers to cut back on or seek alternate methods of transportation. The movement arose in 2017, when Swedish singer Staffan Lindberg announced that he would give up flying due to its detrimental environmental effects. Other celebrity advocates joined


Lindberg, including Thunberg, whose “own efforts to avoid flying have raised the profile of the movement.” In addition to demanding policy change from governments, Thunberg “has offered a moral clarion call to those who are willing to act, and hurled shame on those who are not.”

This sense of shame seems to have impacted travellers, as seen by the decreasing numbers of travelers reported in Sweden and Germany. Additionally, a survey of 6,000 Europeans and Americans led by Swiss bank UBS found that 21% of people in the United States, Germany, France, and the United Kingdom had “reduced the number of flights they took over the past year out of concern for the environment.” These changes are not going unnoticed by airlines; as consumers are beginning to pay more attention to their carbon footprint, airlines are starting to feel pressure to provide more climate-conscious travel options. For example, “Lufthansa and Edelweiss already let you buy carbon offsets, United Airlines is testing a biofuel, JetBlue is investing in hybrid planes and ecofuels, KLM is launching a train service, and SAS lets customers fly with biofuel, a climate-friendly alternative.” Despite these planned changes though, air travel remains the most environmentally detrimental method of transportation, and we can expect for it to hold this position for many years to come.

Research on the topic of the environmental effects of travel, specifically in conjunction with traveling for the purpose of learning or sharing information about climate sciences is limited; while sources that focus on “Academic Flying” do exist, they virtually all discuss the

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18 Ibid, 2.
ethics of flying in order to attend academic conferences discussing environmental or climate issues. My research on the similar tensions that are embodied by science-focused study abroad programs produced very few results. With this paper, I am hoping to begin to fill this gap and contribute to the discourse surrounding the ethics of studying abroad in order to learn about environmental sciences and climate change.

My interest in this topic stems from my own personal experiences throughout my study abroad semester, and the personal reflection that ensued. The experience weighs heavily on me as I continue to question whether it was worth it, why we felt we were entitled to the privilege of embarking on such an environmentally detrimental journey, and whether such programs should even exist. With this, I am wondering what makes students feel justified in participating in such programs, whether the perceived benefits of these experiences outweigh the environmental costs, and how these programs play into the larger discourse of sustainability and tourism. Ultimately, I hope to understand how and why concepts of mobility influence student choices and systemic ideals, as well as how these tensions are navigated by its participants.

The following chapters aim to explore these issues. Chapter One frames travel as technology embedded with social politics. Through first examining the history of air travel, starting with the invention of airplanes and the first successful flights in 1903, and ending with current flight statistics, I emphasize the steady growth of the air travel industry. I then connect this increase in global travel to the growing awareness of climate change and the climate effects of flying. This leads me to question who exactly is responsible for these high rates of carbon emissions, concluding that flying disproportionately engages people from more developed countries, as well as a very specific population within those countries: academics. Finally, I
argue that the choice to fly represents more than just a decision about modes of transportation; embedded within that choice are social politics that must be acknowledged.

Chapter Two first examines the history and objectives of two specific travel-intensive study abroad programs: the International Honors Programs offered by the School for International Training, and Semester at Sea. In considering the goals of each organization, I identify a disconnect between their published values and the types of programs they offer, and infer that both organizations have concluded that the benefits of such travel-intensive semesters outweigh the environmental costs. This prompts me to consider the history and purposes of travel leading up to the advent of study abroad programs through institutions of higher education, as well as the significant growth of the study abroad industry. Finally, I explore the significance of aviation throughout history, arguing that air travel possesses a certain aura that is connected to power and prestige and ultimately plays into the social value of travel in society.

Chapter Three dives into the analysis of the data collected from SIT IHP and SFS student surveys. In doing so, I consider the six main themes that arose as students considered their own experience abroad. These include the fact that the choice to participate in their particular semesters felt hypocritical due to the subject matter they were studying and the carbon footprint of their travel, the feelings of guilt that encompassed their time in the field, the educational benefits of immersive study abroad semesters, the importance of travel “experience”, the need to use updated technology to mitigate climate impact, especially in the context of academic conferences, and finally, the need for in-person collaboration and sharing.

Ultimately, the decision of whether or not to study abroad is a messy one that cannot be reduced to one simple or easy choice. Students grapple with weighing various pros and cons
both in terms of their environmental impact, as well as the effects that studying abroad could have on their own personal, academic, and professional goals. In doing so, all students engage in a level of somnambulism, where they fail to question the overall concept of travel and studying abroad in the first place; this can in part be attributed to the social and cultural capital that travel promises, and the lack of reflexivity promoted by both study abroad organizations and students’ home institutions. Looking ahead, it is crucial that students are encouraged to think critically about their undergraduate experience and understand the potential repercussions of their actions should they choose to partake in a study abroad experience.
METHODS:

In exploring this topic, I primarily consulted scholarly articles and other materials found online. Many articles were found through the JSTOR digital library, a collection of digitized academic journals, primary sources, and books available for use. Information about more recent developments largely came from online news sources, such as BBC, Time Magazine, Forbes, and Business Insider. The School for Field Studies, Semester at Sea, and School for International Training study abroad organization websites were also useful in gathering data specific to each program. Additionally, I used both the Vassar library collection and the North of Boston Library Exchange network to find print sources.

In thinking about this project, I always knew that I wanted to incorporate students’ points of view. After realizing that a gap existed, I decided to conduct my own research in the form of online surveys. The overall goal of these surveys was to determine whether students considered the climate impact of their travel, and if they did, how this affected their decision-making when it came to choosing a study abroad program. I was also curious to learn about whether or not students discussed or thought about their study abroad climate impact over the course of their semester in the field. Finally, I brought up the tension of flying via airplane to discuss climate change. In doing so, I asked students how they would respond to a specific quote from Greta Thunberg as she points out this paradox.

After finishing an internship at the School for Field Studies (SFS), an environmental study abroad program provider for undergraduate students, I inquired about the possibility of surveying their fall semester students. I received an extremely positive response, and was offered two options: the SFS team could either send students a link to my own survey created
through Google Forms, or we could work together to incorporate my climate and travel impact questions into their end of semester program evaluations. Ultimately, I decided that incorporating my questions into their end of semester program evaluations was the option that would provide me with the most data due to the high response rate of the program evaluations (almost 99%), and thus allow for a deeper analysis. At the end of the Fall 2019 semester, I received summaries of the anonymous responses to the five climate and travel impact questions that I had provided, organized by program. I had no access to the raw data. The list of questions for SFS students can be found in Appendix C.

I also reached out to the School for International Training, the study abroad provider that I traveled abroad with, about the possibility of surveying past International Honors Program students. I received a positive response from them as well, and their team sent out the link to my Google Form survey to 851 IHP alumni who studied abroad between 2017-2019 and who had elected to keep receiving SIT emails. In this case, I received the raw survey data and was able to track an individual’s responses as they moved through the survey. The SIT surveys were also anonymous, unless a participant elected to provide their name and email in order to be contacted for a follow-up conversation. The list of questions for IHP students can be found in Appendix D.

In order to analyze the student response data, I compiled the responses to each question in a Google Sheet spreadsheet; ultimately, I ended up with six different spreadsheets, one for each of the five questions SFS included in their end of program evaluations, and one for all of the SIT IHP student responses, which I was able to export from the Google Form directly into a Google Sheet. For each of the five SFS spreadsheets, I listed student responses according to the program the respondent participated in.
While I was able to graph student responses for the more straightforward yes/no questions, the majority of the survey questions required written responses, which were less easily analyzed. For these types of responses, I first conducted an initial read-through to get a sense of what kind of data I had received. I then coded the responses according to topics and themes that students brought up. Here, it is important to note that my analysis does not cover every point that students brought up; while I tried to include as much as possible, the scope of this project was not conducive to addressing every student response. Instead, I focused on main themes that I felt were relevant to my research questions.

**Positionality**

Throughout the research and data evaluation process, I found it crucial to keep my own positionality in mind. As a previous participant of the SIT IHP Climate Change program, I was initially very hesitant to condemn these types of travel-intensive study abroad programs; I myself had an incredibly engaging and meaningful experience, and walked away with an altered perspective of the world that I truly believe could not have been achieved by current classroom teaching practices. With this, I also grew to realize just how problematic my own study abroad choices were, and emerged determined to learn more about this dissonance, as well as how my peers and other students navigated those tensions.

In addition to being an STS major, I have also completed an Educational Studies correlate during my time at Vassar. This presents a very clear tension, especially in regards to this particular topic, where STS theories about technology and social systems are often at odds with the kinds of educational principles and ideals that I have also been taught to value. This tension
will become more apparent in my final analysis, and ultimately plays a part in shaping my argument.

With this, I am also not an Environmental Studies major, so my goals in addressing this issue might differ from a more traditional environmentalist perspective. While still recognizing the importance of these kinds of arguments, I also strive to consider other points of view in order to provide a more comprehensive analysis.
CHAPTER ONE: Framing Air Travel as Technology Embedded with Social Politics

In thinking about study abroad and the travel required for such programs, it becomes clear that technology is paramount in facilitating that movement. While technologies are commonly thought to ‘level the playing field’ by providing individuals with tools to increase productivity, they can also be seen as “ways of building order in our world,” and not always in mutually-beneficial ways. With this, it is important to recognize that technology “can be used in ways that enhance the power, authority, and privilege of some over others,” and that in many cases, can work to “[engineer] relationships among people that, after a time, becomes just another part of the landscape.” Due to the relevance of airplanes to both present-day domestic and international travel, and study abroad semesters in particular, a focus on air travel technology and its embedded politics, as well as its relation to climate change, is crucial to the study of how students think about their carbon footprint when studying abroad. This analysis also points to the kinds of conscious and subconscious social choices that students encounter in deciding to travel and study abroad.

The Rise of Air Travel

Orville and Wilbur Wright’s first successful flight in December of 1903 in Kitty Hawk, North Carolina, lasted only twelve seconds and covered a mere 120 feet, yet established a foundation in aviation that set the stage for what was to become a mass market for war, business

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20 Ibid, 125.
21 Ibid, 124.
While company careers as trenches straight everything, though, as aviation “seemed like a promising option.”24 Initially only able to fly in straight lines and unable to carry much weight, airplanes were only used to fly over enemy trenches in order to gather information. As aircraft design improved, however, they were soon designed to turn, dive, and climb, which made them much more useful for the purposes of war.25

After WWI, the public began to express interest in flying too; the “majority wanted a taste of flight.”26 While Americans were reluctant to abandon more developed technology such as steam trains, Europeans were eager to engage in flying as soon as possible.27 When the ban on commercial aviation was lifted in Britain in April of 1919, retired Royal Air Force pilots pursued careers in taking the public on short trips and holidays, and the Aircraft Travel and Transport company (AT&T) began operating a regular international flight between London and Paris. While AT&T fell into debt in 1920, by 1921 six other companies were offering service between London and Paris.28 Trouble soon arose, however: despite some growth, “the summer boom was

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23 Ibid.
24 Ibid, 128.
25 Ibid.
26 Marc L.J. Dierikx, *Clipping the Clouds: How Air Travel Changed the World*, (Westport, CT: Praeger, 2008), 129.
27 Ibid, 130.
28 Ibid, 129.
inevitably followed by the winter slump and the collapse of revenues.”

Even government subsidies given to encourage competition had little impact, as companies “could not even come close to making a profit” due to high costs and railway competition. It is important to note that at this point, most growth was achieved through transporting freight and mail as opposed to through selling tickets to passengers. As one of the largest military powers in the world, the British government acknowledged the “humiliating prospect looming of air communications to the Continent being totally dependent” on other operators, and “for reasons of prestige alone … could not afford to let itself fall behind.” This prompted the formation of Imperial Airways in 1924, when the four largest existing airlines were merged into one in an attempt to compete with its mainland counterparts. Imperial Airways subsequently became one of the first profitable airlines in the world. With this, the first commercial airline in the United States wasn’t established until 1926.

Early airlines had trouble “competing in speed with express trains,” and the added cost and discomfort made it challenging to attract customers. With no more than 50% of flights arriving on time due to mechanical breakdowns and navigational errors, and flight crews being instructed to “be careful so that passengers could not see railway lines for fear that they might watch an express train overtaking them,” it comes as little surprise that the phrase “if you have

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30 Ibid., 868.
31 Ibid., 867.
32 Ibid.
33 Ibid., 873.
34 Dierikx, Clipping the Clouds: How Air Travel Changed the World, 131.
35 Ibid., 27.
36 Ibid., 130.
37 Ibid., 27.
time to spare, go by air”\textsuperscript{38} developed. As a result, significant increases in passenger air travel occurred only after the 1930s, when flying became more comfortable and dependable; this, however, was only the case for a very specific population of travelers.\textsuperscript{39} The Munich Agreement in particular demonstrated that by the end of the 1930s “air travel had become a normal means of transportation for those dealing with international politics,”\textsuperscript{40} as the political leaders who attended the meeting all arrived by plane. Unsurprisingly then, “senior civil servants and business executives together made up 70% of all European airline passengers”\textsuperscript{41} in the 1930s. With access to flying, this group of travelers was able to increase Europe’s “control from the motherland over colonial administration,”\textsuperscript{42} as well as increase oversight within international corporations, such as in the oil, rubber, coffee, and tea industries; as such, “the airplane was the colonizer’s new travel instrument, an agent of European vigor and power,”\textsuperscript{43} and was often regarded as a “white man’s business,”\textsuperscript{44} as 90-95% of aircraft passengers were European.\textsuperscript{45}

The first signs of significant expansion emerged around 1950, when air travel began to be marketed towards a larger portion of the public. In 1948, Washington, D.C. based Capital Airlines was the first airline to introduce “coach class” on the New York-Chicago air route in the hopes of being able to attract enough customers to compete against railways.\textsuperscript{46} By reducing prices 25-40% from the standard airfare and gradually shifting the focus on travel to the “sightseeing characteristics of the various destinations served,”\textsuperscript{47} the coach traveler eventually

\textsuperscript{38} Dierikx, Clipping the Clouds: How Air Travel Changed the World, 27.
\textsuperscript{39} Ibid, 30.
\textsuperscript{40} Ibid, 20.
\textsuperscript{41} Ibid, 32.
\textsuperscript{42} Ibid.
\textsuperscript{43} Ibid, 33.
\textsuperscript{44} Ibid.
\textsuperscript{45} Ibid.
\textsuperscript{46} Ibid, 58.
\textsuperscript{47} Ibid, 56.
took over on board; 1958 was “the first year in which more people flew between the Old World and the New than traveled by ship.” 48 1958 was also the year that Boeing introduced the 707, the first commercial jet aircraft, which was soon followed by the launch of the Douglas DC-8 in 1959 by the Douglas Aircraft Company. 49 The arrival of these models marked the beginning of mass transit via airplane: in 1948 20.9 million passengers bought plane tickets. 50 By 1960, 106 million passengers flew; that number had almost quadrupled by 1973, and surpassed half a billion passengers by 1977. 51 52 These steep increases in the number of airplane passengers correlate with ticket price drops in the late 1970s, as well as economic prosperity in the US, and later in Europe as well. This meant that more individuals and families could buy consumer items, and spend more on their annual holidays, than ever before. 53

Similarly, the air travel industry today shows no signs of slowing down: according to the Airline Industry Statistics released by the International Air Transport Association (IATA), 4.4 billion trips were taken in 2018, increasing 6.9% from 2017. 54 With this, it is important to note that these statistics do not indicate that 4.4 billion individuals flew, as “one person might account for several journeys depending on how much they traveled.” 55 Interestingly, IATA notes that while airlines in the Asia-Pacific region transported the largest number of passengers regionally, the top five nationalities traveling on international routes were citizens of the UK, the United

48 Dierikx, Clipping the Clouds: How Air Travel Changed the World, 60.
50 Dierikx, Clipping the Clouds: How Air Travel Changed the World, 38.
51 Ibid, 96.
52 A graph displaying this data can be found in Appendix E.
States, China, Germany, and France (in that order). Additionally, four out of the top five airlines ranked by total scheduled passenger kilometers flown were American airlines, indicating that they can be considered some of the busiest system-wide.56

**Growing Awareness of Climate Change**

In the 1820s, approximately eighty years before the first successful flight took place, French mathematician and physicist Joseph Fourier pioneered the greenhouse analogy, suggesting that small amounts of the Earth’s radiation is trapped inside its atmosphere, acting as the glass walls of a greenhouse do, and thus leading to increasing temperatures over time.57 This realization led to the concept of climate change. While oversimplified, this analogy stuck, prompting a series of scientists to explore the concept and gradually gain more information and data. By the 1930s, British Engineer Guy Stewart Callendar found that the “United States and North Atlantic region had warmed significantly on the heels of the Industrial Revolution,”58 and his calculations suggested that “a doubling of CO2 in Earth’s atmosphere could warm Earth by 2 degrees C (3.6 degrees F).”59 Even though Callendar’s ideas were met with skepticism, his findings drew the attention to the possibility of global warming, which “played a part in garnering some of the first government-funded projects to more closely monitor climate and CO2 levels.”60 Perhaps the most famous of these research projects was led by geochemist Charles Keeling; data gathered from a monitoring station installed on top of the Mauna Loa

58 Ibid.
59 Ibid.
60 Ibid, 3.
Observatory in Hawaii in 1958 revealed an “upward, saw tooth-shaped curve [that] showed a steady rise in CO2 levels, along with short, jagged up-and-down levels of the gas produced by repeated wintering and greening of the Northern Hemisphere.” This became known as the “Keeling Curve,” and an image of this graph can be found listed in Appendix F.

As computer modeling began to develop, possible outcomes of this rise in CO2 levels were predicted, consistently reaffirming Callendar’s prediction that a doubling of CO2 levels could result in a warming of 2 degrees Celsius within the next century. It wasn’t until the 1980s, however, that “scientists sounding the alarm about climate change began to see media and the public paying closer attention,” as the sharp increase in global temperatures became harder and harder to ignore. 1988 marked a sort of turning point, as the hottest summer on record was recorded, and widespread drought and wildfires spread across the United States. 1988 was also the year that the Intergovernmental Panel on Climate Change (IPCC) was established by the United Nations Environment Programme and the World Meteorological Organization. Tasked with preparing a “comprehensive review and recommendations with respect to the state of knowledge of the science of climate change,” the IPCC has since produced five Assessment Reports, as well as a range of additional Technical Papers, Special Reports, and Methodology Reports.

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61 “Climate Change History,” 3.
The Climate Effects of Flying

In considering the point of view of a climate activist, it becomes abundantly clear that flying via airplane, for any purpose, should be avoided at all costs. As communities and individuals become increasingly aware of their climate impacts, airplanes are “often singled out as the most carbon-intensive form of travel in terms of passenger per mile.”

In 2015, the Environmental Protection Agency (EPA) estimated that the transportation sector was responsible for 28% of all greenhouse gas emissions, of which aviation accounted for 8% of these transportation emissions. Therefore, aviation represented at least 2-3% of annual global CO2 emissions. While this may seem like a relatively small percentage, it is important to put it into context; for example, the entire country of Germany and the city of Beijing each contribute about the same amount of CO2 emissions each year as aviation produces annually. Additionally, in terms of an individual’s energy usage, some estimates show that “carbon emissions from one round-trip jetliner trip between New York and Los Angeles generates more than 10 percent of the average American’s total carbon footprint for an entire year.”

Ultimately, when considering the speed of which aviation produces emissions, it is clear that “hour for hour, there’s no faster way to warm the planet,” as “air travel has the highest specific impact on short-term warming.”

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65 Parke Wilde, “Frequently Asked Questions (FAQ) and Sources List,” Calling Upon Universities and Professional Associations to Greatly Reduce Flying, July 12, 2019, https://docs.google.com/document/d/1URRRh4zMSpvtZY08F9-Rkbx0qkJNmfzIzqOlqZWKkE/edit#heading=h.cys4uay8lqcy, 3.
66 Humes, *Door to Door: the Magnificent, Maddening, Mysterious World of Transportation*, 86-87.
It comes as little surprise, then, to learn that these commonly-advertised calculations do not take into account the total radiative forcing that aviation produces, thus understating the full climate impact of flying. Although there is still uncertainty concerning how to accurately measure the climate effects of aviation, there is a general consensus that its impact is significantly larger than that of the CO2 emissions alone; this is due to the release of emissions at high altitudes. In 1999, a special report on aviation published by the IPCC called attention to the impacts of non-CO2 aircraft emissions. This report estimated the “total historic impact of aviation on the climate to have been two to four times higher than for CO2 emissions alone,” taking into account the radiative forcing caused by non-CO2 warming pollutants such as aerosols, water vapor, and nitrogen oxides. Radiative forcing can also be thought of as the “direct measure of the impact that recent human activities …. are having on the changing planet’s climate,” and is calculated as an energy balance between incoming solar radiation energy and outgoing infrared radiation emission energy. The contribution of these emissions to the formation of aircraft condensation trails (contrails) is significant, as contrails form when water vapor condenses on aerosol emissions from fuel combustion, eventually forming cirrus or altocumulus clouds. These clouds ultimately trap thermal radiation, contributing to the estimation that the total radiative forcing is much higher than that induced by greenhouse gases alone. In addition to the formation of contrails, ozone generated by nitrogen oxide, and the

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negative radiative forcing from the destruction of methane by nitrogen oxide are also not included in most climate-impact calculations.\textsuperscript{73}

While it remains difficult to establish exactly what kind of climate impact these emissions have, especially because their formation “depends largely on atmospheric conditions, such as temperature and the background concentrations of water vapour and nitrogen oxides,”\textsuperscript{74} research has indicated that “their impact on global warming could dwarf that of CO2 from aviation.”\textsuperscript{75} By some current estimates, the total climate impact of planes is “two to three times greater than the impact from the CO2 emissions alone.”\textsuperscript{76} This increase is reflected by a study published in 2009; researchers evaluating how aviation emissions contribute to the radiative forcing of our climate reported that flying was responsible for 4.9% of all human climate impact.\textsuperscript{77}

As the commercial aviation industry has continued to grow rapidly since then, many believe “it is safe to attribute 5% of human climate impact to aviation.”\textsuperscript{78} In addition to the emissions that powering the physical aircraft produces, it is also important to consider several other emission sources that are produced as a result of flying: “transportation to the airport, jet fuel production and transportation, operating airports, and the embedded emissions for everything from aluminum in aircraft to cement and steel airports”\textsuperscript{79} could all be curtailed by choosing to fly less.

\textsuperscript{73} Ibid, 2.
\textsuperscript{74} Timperley, “Explainer: The Challenge of Tackling Aviation's Non-CO2 Emissions,” 2.
\textsuperscript{75} Ibid.
\textsuperscript{78} Wilde, “Frequently Asked Questions (FAQ) and Sources List,” 2.
\textsuperscript{79} Ibid.
Unequal Distribution of Travel

The emergence of these statistics begs the question of who exactly is responsible for these high rates of carbon emissions. Research shows that the overall distribution of flights is highly unequal, with only a small fraction of the total global population responsible for most flights. Globally, it is estimated that “only about 2% to 3% of the world population take an international flight over the course of a year,” and less than 20% of the global population has ever taken a flight, illustrating that “air travel is very unequally distributed with a small number of high-footprint hypermobile travelers.” This trend is also reflected within individual countries. For example, a 2015 poll shows that 55% of Americans took zero trips by commercial airlines, 25% had taken 1 to 2 trips, 9% had taken 3 to 4 trips, and 10% had taken 5 or more trips. This trend was also reinforced by multiple studies in the United Kingdom. David Banister, Professor of Transport Studies at the School of Geography and the Environment and the Transport Studies Unit at the University of Oxford, found that “a disproportionate amount of air travel across all airports in England and Wales is carried out by the 8 percent of those in the highest personal income group.” These inequalities in flight activity were also demonstrated by United Kingdom household travel surveys, which reported that between 2006 and 2012, “54.8 percent of those surveyed made no flights, yet at the other end of the scale 3.4 percent of respondents accounted for 30 percent of all flights, with 5 or more international flights.”

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80 Ciers, "Carbon Footprint of Academic Air Travel: A Case Study in Switzerland," 2.
82 Ciers, “Carbon Footprint of Academic Air Travel: A Case Study in Switzerland," 2.
84 Ibid.
Similarly, a 2014 survey by the Department of Transport found that 15% of the United Kingdom’s population took 70% of flights.\textsuperscript{85} With this, Mike Childs, Head of Science, Policy, and Research at Friends of the Earth UK, notes that “we need to recognise that aviation is a luxury and we need to share that luxury fairly.”\textsuperscript{86}

The extent to which aviation can be considered a luxury is further highlighted by comparing the carbon emissions created by both short- and long-haul flights to the carbon emissions made by citizens in less-developed countries; often, “taking a long-haul flight generates more carbon emissions than the average person in dozens of countries around the world produces in a whole year.”\textsuperscript{87} Calculations show that “even a relatively short return trip from London to Rome carries a carbon footprint of 234 kg of CO2 per passenger — more than the average produced by citizens of 17 countries annually,”\textsuperscript{88} while a long-haul round-trip flight from London to New York generates about 986 kg of CO2 per passenger. With this, German nonprofit Atmosfair explains that there are “56 countries where the average person emits less carbon dioxide in a whole year — from Burundi in Africa to Paraguay in South America.”\textsuperscript{89}

Also important to note is the fact that climate change disproportionately affects low-income populations. For example, “people living in the 100 developing countries most affected by climate change are responsible for only 3% of global greenhouse gas emissions.”\textsuperscript{90}

Clearly, there is a substantial difference between the average CO2 emissions produced each year


\textsuperscript{86} Ibid.

\textsuperscript{87} Ibid.

\textsuperscript{88} Ibid.

\textsuperscript{89} Ibid.

per person depending on country of residence. The IPCC describes that while “specific livelihoods and poverty alone do not necessarily make people vulnerable to weather events and climate,”91 “the socially and economically disadvantaged and the marginalized are disproportionately affected by the impacts of climate change and extreme events.”92 With this, indigenous peoples, women, children, the elderly, and disabled people “experience multiple deprivations that inhibit them from managing daily risks and shocks and may present significant barriers to adaptation.”93 Additionally, “it is many of the world’s lowest-income peoples and areas—such as low-lying coastal zones and small islands, polar regions, and Africa as a whole—that will be most harmed by the changes associated with climate change,”94 due to their relative inability to adapt as well as their geographic location in areas associated with major environmental change. In 2017, the Department of Economic and Social Affairs identified the main channels through which this inequality is formed, emphasizing that “the relationship between climate change and social inequality is characterized by a vicious cycle, whereby initial inequality makes disadvantaged groups suffer disproportionately from the adverse effects of climate change, resulting in greater subsequent inequality.”95

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92 Ibid.
93 Ibid.
Academic Flying

Just as flying disproportionately engages people from more developed countries, it also disproportionately engages a certain group of people within those highly mobile populations: academics. John Wiseman, former Deputy Director of the Melbourne Sustainable Society Institute at the University of Melbourne, describes how “universities and academic professional associations often embrace sustainability… but they also tend to have very large carbon footprints.”

Despite often being environmentally conscious, many researchers are “frequent travelers due to the importance of conferences, workshops, international collaborations, visiting positions, etc., for their career advancement.” According to the CoolClimate Network calculator, an online carbon footprint estimating tool developed at the University of California, Berkeley, a typical household in Chicago, IL, emits 43.5 tons of CO2 emissions per year, of which 1.38 tons (3.2%) can be attributed to air travel. In this example, an average household income (below $80,000 per year) and 3,100 miles of air travel per year are assumed. In contrast, an academic professional’s household with an income of $80,000-100,000 and 12,000 miles of air travel per year emits 55.8 tons of CO2 equivalent emissions per year, of which 5.36 (9.6%) can be attributed to air travel. With this, it is important to note that many university-based academics fly much more than 12,000 miles per year, especially if they actively partake in attending and presenting at conferences, or conducting field work.

Within the world of traveling for academic purposes, often referred to as “academic flying” or “conference tourism,” lies an inherent contradiction: “by flying overseas to

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97 Ciers, "Carbon Footprint of Academic Air Travel: A Case Study in Switzerland" 2.
conferences and meetings, [scientists] thus perpetuate the problem [they study].”\textsuperscript{98} This contradiction is only intensified when considering scientists who specifically focus on environmental or climate sciences. In thinking about this uncomfortable contradiction, many have started to question “whether the carbon footprints of ecologists outweigh the environmental benefits of their findings and of their lobbying.”\textsuperscript{99} In the case of conservation biology, for example, “most of its best researchers are based at universities in the Northern Hemisphere, but most of their field sites are located in developing countries in the south.”\textsuperscript{100} This means that these professionals and their students burn an enormous amount of fuel each year as they commute between their field sites and home institution. When considering conferences, it seems that they, too, are “actually jeopardizing human wellbeing due to the environmental impact [they cause].”\textsuperscript{101} With this, it is especially important to note that “those who are particularly renowned and most involved in environmental politics become ‘constant fliers’ who are always jetting off to field sites and meetings.”\textsuperscript{102}

This point is reinforced by a study conducted by researchers from the École Polytechnique Fédérale de Lausanne (EPFL) in Lausanne, Switzerland from 2014 to 2016. Using flight data for the years 2014 to 2016, collected from Carlson Wagonlit Travel, the University’s official travel agency, Ciers et al. (2018) analyzed the carbon footprint of air travel by researchers. Approximately 80% of the travel made by EPFL researchers during the three


\textsuperscript{99} Ibid.

\textsuperscript{100} David Grémillet, “Paradox of Flying to Meeting to Protect the Environment,” \textit{Nature}, vol. 455, no. 30 (October 2008): 1175.


\textsuperscript{102} Grémillet, “Paradox of Flying to Meeting to Protect the Environment,” 1175.
year timeframe of the study were booked through this agency; the remaining 20% were booked directly by the researchers themselves. In the latter case, only the ticket price and airline company were known, leading to the exclusion of these flights from the study analysis. The dataset from the Carlson Wagonlit Travel agency that was used in the study analysis “includes GHG emissions, distance, price, exact flight route, and service class for every trip.”

The EPFL study ultimately found that 3,334 members of academic staff took 14,949 flights and traveled over 100 million km over this three year period. After calculating the total emissions produced by these flights, it becomes clear that “air travel accounts for one third of the institute’s total CO2 emissions (corresponding to at least half of the total RF), similar to the CO2 emissions of electricity and heating, and daily commuting.” With this, Ciers et al. found a clear correlation between increased emissions and higher service classes, as well as between carbon footprint and seniority; “the air travel impact of individual researchers [was] highly unequally distributed, with 10% of the EPFL researchers causing almost 60% of the total emissions from EPFL air travel.” For example, “professors emit on average 10 and 5 times more GHGs compared to PhD students and postdocs, respectively.” Additionally, “professors— and to a smaller extent senior scientists— are the main users of business and first class travel, which is negligible for PhD students and postdocs,” and “cause two to four times more emissions per person, compared to economy class due to the increased floorspace requirements.” This data reinforces the point that those who are most renowned or involved in

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103 Ciers, "Carbon Footprint of Academic Air Travel: A Case Study in Switzerland," 2.
104 Ibid, 3.
105 Ibid, 1.
106 Ibid.
107 Ibid, 4.
108 Ibid.
109 Ibid, 2.
environmental issues — often professors and scientists — are perhaps those who are causing the most damage, both as a result of their class privilege within the country they live in, and of their status as an academic within that population.

Other studies have come to similar conclusions as well. For example, Nevins (2014) measured the ecological footprint of the 2011 annual meeting of the Association of American Geographers (AAG) in Seattle, Washington, focusing specifically on the carbon footprint of the flights taken to transport participants to and from Seattle. To do this, Nevins used a random sample of 300 registered participants, finding that “approximately 82 percent of attendees traveled more than 1,700 km (1,054 miles) each way to and from Seattle, with about 17 percent of attendees coming from a distance greater than 8,100 km (5,022 miles) in each direction.” Using the carbon emissions calculator provided by the International Civil Aviation Organization, Nevins estimated that “the average conference-goer who flew to and from Seattle produced 793.86 kg of carbon emissions in round-trip air travel.” With this, an estimated 7.66% of people who attended the conference were assumed to have traveled there via land transportation. Thus, the “total conference-related air travel resulted in roughly 5,351 metric tons (5,351,395 kg) of carbon emissions,” making the AAG conference “the single most ecologically costly, collective endeavor of professional geographers in the United States.” Ultimately, Nevins raises the questions of “why geographers persist in such travel” and why they have not begun

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11 Ibid.
12 Ibid.
13 Ibid, 299.
14 Ibid, 304.
thinking of and switching to alternative solutions to annual gatherings that require such extensive travel.

In thinking about the large ecological footprint of the AAG, Nevins examines “how professional geographers, in the form of the AAG, have responded to their travel-related ecological footprint”\(^\text{115}\) and subsequently introduces the concept of ecological privilege. It is clear that as scientists, AAG conference attendees are not unaware that climate change is happening; in fact, the overarching theme of the 2010 AAG was climate change, with more than fifty sessions dedicated to the topic. A central concern of Nevins’, then, is the “inconsistency between environmental attitude and actual practice”\(^\text{116}\) that is embodied by the AAG conference, as well as the participating geographers. Nevins explains how there has been “no organization-wide discussion about the ecological costs of academic travel and AAG meetings in particular,”\(^\text{117}\) and that the communication surrounding the travel incurred by the annual meetings “normalizes it, never raising the issue of ecological footprint,”\(^\text{118}\) and even privileges air transportation by “relegating ground transportation to a lesser status at best.”\(^\text{119}\) To help explain this phenomenon, Nevins cites ideas of ecological privilege:

> “As privileged people, they also greatly benefit from the status quo. As such, even the ecologically conscious among the privileged, with rare exceptions, are only willing to inconvenience themselves to a small degree. They do not want to be denied the benefits of privilege such as the ability to fly to far-off sites to do what is deemed as important and rewarding, for instance, or to have friends, family, and colleagues from around the world come to visit—their spatial mobility in other words, especially when they do not have to pay many of the costs.”\(^\text{120}\)


\(^{116}\) Ibid, 299.

\(^{117}\) Ibid, 304.

\(^{118}\) Ibid, 305.

\(^{119}\) Ibid.

\(^{120}\) Ibid.
With this, Nevins explains how the social position of AAG geographers “allows them to disregard [the] relationship”\textsuperscript{121} between their personal and professional travel habits and injustice; by continuing to fly to annual AAG conferences, they have essentially exempted themselves from making exactly the kinds of choices climate science has proven that we need to make. Ultimately, “they do harm-inducing things because they can,”\textsuperscript{122} using sociopsychological denial mechanisms to justify their behavior.\textsuperscript{123}

**Politics of Growth**

With this realization that air travel disproportionately engages high-income individuals as well as academics, who, in many cases, never even shoulder the burden of the climate effects of their actions, has come the reality that it is precisely these high-income populations that need to make significant lifestyle changes in order to slow the warming of our Earth. In 2007, George Monbiot, author of *Heat: How to Stop the Planet From Burning*, asserted that in order to stop global average temperatures from rising to more than two degrees Celsius above pre-industrial levels—what many call the ‘critical threshold’, or the “safe” level of warming—a global carbon emissions reduction of 60% is necessary. This translates to “an average cut by 2030 of around 90 per cent”\textsuperscript{124} in the “rich countries.”\textsuperscript{125} Clearly, these kinds of changes are not going to be easy to make, especially when considering our current lifestyle habits and transportation systems. Monbiot acknowledges this, and strives to outline exactly how we can accomplish these changes.

\begin{footnotes}
\footnotetext[121]{Joseph Nevins, “Academic Jet-Setting in a Time of Climate Destabilization: Ecological Privilege and Professional Geographic Travel,” 305.}
\footnotetext[122]{Ibid.}
\footnotetext[123]{Ibid, 300.}
\footnotetext[125]{Ibid.}
\end{footnotes}
After considering other air travel options such as using alternative fuels like biodiesel, ethanol, or liquid hydrogen, as well as the possibility of completely converting to other types of vehicles such as ultra-high speed trains, passenger ships, propeller planes, and airships, Monbiot concludes that “not only is there no means of cutting emissions from planes to anything resembling the necessary level, but there is no form of transport which achieves much more than a quarter of their speed without producing comparable quantities of carbon.” Ultimately, he argues that “the growth in aviation and the need to address climate change cannot be reconciled,” and that a 90% cut in emissions “requires not only that growth stops, but that most of the planes that are flying today are grounded.” This analysis very clearly reveals a reality that is both difficult to accept and that requires immediate action.

In considering the climate effects of flying in conjunction with the unequal distribution of travel, and Academic Flying in particular, it becomes clear that choosing whether or not to fly amounts to more than simply deciding what the most convenient method of transportation is. Embedded within that choice is the reality that, as a result of the present-day environmental impacts of flying, certain groups of people are plunged into a cycle of inequality that they are unable to control, and that most have done nothing to contribute to. Monbiot describes how “by turning on the lights, filling the kettle, taking the children to school, driving to the shops, we are condemning other people to death,” and making the choice that “these activities are worth the sacrifice of the biosphere and the lives of the poor.” This realization points to a degree of dissonance, where “the people who are most concerned about the inhabitants of other countries

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126 Monbiot, Heat: How to Stop the Planet From Burning, 186.
127 Ibid, 182.
128 Ibid.
129 Ibid, 22.
130 Ibid, 187.
are often those who have travelled widely… whose politics were forged by their experiences abroad,” and whose habits will need to be modified more than any other subset of the population in order to achieve ‘safer’ levels of Global Warming. In this way, the choice to fly is an extremely political one, where there seems to be “no connection between intention and action,” and where individual choices of the wealthiest people directly disadvantage vulnerable populations; ultimately, “if you fly, you destroy other people’s lives.” The degree to which this is recognized among the public — and study abroad students in particular — remains problematic, as most people are completely unaware of the extent to which their choices impact others around the world.

131 Monbiot, Heat: How to Stop the Planet From Burning, 172.
132 Ibid.
133 Ibid, 188.
CHAPTER TWO: The Origins of Travel-Intensive Study Abroad Programs and the Continued Value of Travel in Society

The History and Goals of Travel-Intensive Study Abroad Programs

To truly understand the objective of travel-intensive semesters abroad, and in turn the kinds of experiences that students are taught to value, we must first look to their origins. Initially known as “faculty-led study tours,” these extended semesters involved travel and “visits to many countries, offering coursework in English taught by accompanying faculty members and focusing on world issues.” The first of such programs was created by Dr. James Edwin Lough, a psychology professor at New York University, who believed that traditional teaching methods of American universities were not sufficient; travel and first-hand experience also needed to be a part of every scholar’s education. Lough ultimately developed the University World Cruise, a so-called “floating university” that would travel around the world with hundreds of students and staff onboard. Despite initial low enrollment numbers and the loss of support from New York University, Lough departed out of Hoboken, New Jersey under the name of University Travel Association (UTA) on the SS Ryndam steamship in 1926, with 504 students, 63 faculty and administrative staff, and a large ship staff and crew on board. The students came from forty states, as well as Canada, Cuba, and Hawaii (not yet a state at the time), and represented 143 colleges. Within seven and a half months, the university “covered 41,000 miles and visited 35 countries and more than 90 cities.” Stops included New York, Cuba, Hawaii, Japan, China,

135 Ibid.
138 “Our History: Institute for Shipboard Education & Semester at Sea.”
139 Ibid.
the Philippines, Siam (now Thailand), Singapore, Indonesia, Ceylon, India, Arabia, India, Egypt, Algeria, the French Riviera, Spain, Italy, Malta, northern France, Holland, Belgium, Germany, Scandinavia, and Great Britain, before heading back to New York.  

On board, Lough and his staff tried to recreate college and campus life as much as possible, with sports teams, extracurricular activities, and student organizations. The ship also boasted two swimming pools, a gymnasium, library, classrooms, study halls, pianos, hospital and dental offices, laundry rooms, and a barbershop. The goals of the journey were clear, however; on their first day at sea Lough described how it would not be “a mere sightseeing tour, but a college year of educational travel and systematic study to develop an interest in foreign affairs, to train students to think in world terms, and to strengthen international understanding and good will.” Students spent about half their time on board, and half on shore, with classes held regularly throughout the day, and field-study components based on the countries they visited. Professors sought to give “new significance to [the] text-books and awaken interest which [would] endure long after the Cruise [had] ended.” Along the way, students met with the Siamese navy, King Rama VII, Mussolini, the mayor of Berlin, and Ghandi, while also stopping to visit important sites like the Taj Mahal.

With the success of the first UTA voyage, came competing programs, like the International University Cruise (IUC), and later, Traversity, a ship and rail voyage. The competition between the institutions prevented each organization from recruiting enough

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141 Ibid.
142 “Our History: Institute for Shipboard Education & Semester at Sea.”
144 Ibid.
students to sail, however, leading to the merge of UTA and IUC.\textsuperscript{145} The impact of these “study tours” would become apparent at the fiftieth reunion of the 1929 UTA voyage in 1976 — “participants spoke in glowing terms of ‘living in the world, not just America, and of how it changed their lives.’”\textsuperscript{146} They “[remembered] details as though the events had occurred that very day,”\textsuperscript{147} describing the voyage as “the greatest educational experience of [their] lives.”\textsuperscript{148} Perhaps most importantly, “they remembered Dean Lough’s characterization of the voyage and the goals set on the first day at sea … and they all agreed that Dean Lough’s goals had been met.”\textsuperscript{149} Ultimately, it seems that these floating universities offered something far from superficial and had a lasting impact on its student voyagers, who reflected on their experiences long after the SS \textit{Ryndam} pulled into its final port. Today, the organization is known as Semester at Sea, and continues to offer experiential learning opportunities “using a ship as its traveling campus and sailing to multiple ports around the world.”\textsuperscript{150}

When Karl Jaeger, an American educator and activist, heard about the floating university cruises, he was impressed. Jaeger contacted former participants, and “what he learned convinced him of the educational viability and vitality of a traveling study abroad program.”\textsuperscript{151} He was determined to create a similar experience “to make students aware of world problems and motivate them to do something,”\textsuperscript{152} and set about planning an ambitious, multi-country academic-year study tour called The International School of America. Jaeger reworked Lough’s

\textsuperscript{145} Hoffa, \textit{A History of US Study Abroad: Beginnings to 1965}, 94.
\textsuperscript{146} Ibid, 95.
\textsuperscript{147} Ibid.
\textsuperscript{148} “Our History: Institute for Shipboard Education & Semester at Sea.”
\textsuperscript{149} Hoffa, \textit{A History of US Study Abroad: Beginnings to 1965}, 96.
\textsuperscript{150} “About Us,” Semester At Sea, Accessed March 28, 2020, \url{https://www.semesteratsea.org/contact/about-us/}.
\textsuperscript{151} Hoffa, \textit{A History of US Study Abroad: Beginnings to 1965}, 180.
\textsuperscript{152} Ibid.
itinerary, planning for more time on shore rather than in transit, and “[concluding] that air travel (on the weekends) was the best way to make this possible.” After traveling to thirteen countries to secure classrooms and arrange stays with English-speaking host families, Jaeger proposed his traveling school to the State of New York Board of Regents, and with his charter granted, began to hire faculty members and promote his program. His first class of students flew out of Boston in September of 1959 to visit Athens, Bangkok, Berlin, Cairo, Calcutta, Florence, Geneva, Hong Kong, Honolulu, Istanbul, London, New Delhi, Paris, Rome, Tokyo, San Francisco and Washington DC, before finishing in New York in May of 1960.

Students stayed with local families in most locations, only occasionally booking hotels, and traveled long distances via Pan American World Airways, and by bus or rail within countries. Most participants were high school seniors or gap year students, taking advantage of “an opportunity to ‘study’ other countries by a combination of reading, observing, and interacting with people.” “School bulletins” sent home detailed accounts of their adventures, and kept friends and family up to date. A portion of the School Bulletin No. 1 from December 1959 emphasizes the impact of their educational experiences:

“What proved surprising to the students is that almost everything newly observed helps to enlarge their knowledge and enrich the meaning of their formal study. Briefings by the U.N. officers, by the State Department, and by special lecturers, obviously supplement School texts in social sciences, humanities and biology. The fact that the meaning of water to life should be better understood by students after a flight across the desert and semi-desert of America’s southwest, that problems of integrated education would be demonstrated to them firsthand while they were guests of Balboa High School in San Francisco, that the enrichments of interracial culture would be discovered while they lived with families of Punahou, were unforeseen lessons. Countless incidents every day help

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154 Ibid.
155 Ibid, 181.
clarify social or scientific fact and deepen comprehension of text matter which normally would not come alive for years later, if ever (School Bulletin No. 1)."\textsuperscript{156}

In 1960, The International School of America was renamed the International Honors Program (IHP). In 1989, IHP became affiliated with Bard College in order to be able to offer American academic transcripts, and later became affiliated with Boston University. Today, IHP is affiliated with the School for International Training (SIT) and programs are limited to traveling to two to four different countries over the course of one semester. While SIT offers some multi-country programs that spend most of the semester in one country with excursions to another country, the six IHP programs offered today divide the semester evenly between sites, beginning in the United States and then continuing on to spend four to five weeks in each of three different countries. Each of these six programs are themed around a specific area of study; topics include Cities in the 21st Century, Food Systems, Health and Community, Human Rights, International Relations, and Climate Change— the program that I participated in.\textsuperscript{157} As students compare and contrast various aspects of these topics, they have the “opportunity to test their assumptions, deepen their knowledge of the issues, and reflect on the kaleidoscope of experiences to which they have been exposed.”\textsuperscript{158}

In considering the goals of current-day multi-country study abroad programs like Semester at Sea and the SIT IHP programs, it is critical to look to the resources that each organization has provided about its own intentions, which can often be found online in the form of mission statements. Semester at Sea advertises that their mission is “to educate individuals

\textsuperscript{156} Hoffa, \textit{A History of US Study Abroad: Beginnings to 1965}, 181-182.


with the global understanding necessary to address the challenges of our interdependent world.”

They emphasize the importance of students becoming “global citizens,” arguing that they “[provide] a platform to expose students to world issues, engage with people from other cultures, [provide] guidance in and outside of the classroom, and the tools to grow as an individual by gaining a global perspective.” Similarly, SIT also stresses the importance of travel to a students’ learning; their mission is “to work globally to enhance the capacity and commitment of individuals, institutions, and communities to create a more sustainable, peaceful, and just world.”

According to SIT, the IHP programs in particular “emphasize the multidisciplinary analysis of issues and integrate experience-based learning throughout the semester.” Clearly, the objective of both organizations rests on the hope that by exposing young people to the world by way of academic study, students will internalize what they have learned and become leaders who will make positive changes that are ultimately influenced by their heightened global awareness and experiences provided by each organization abroad.

What is particularly interesting when considering both the values of Karl Jaeger, and the SIT mission statement, is that a climate change themed semester that involves literally jetting off around the world even exists as an IHP program. Karl Jaeger was not only an educator, but also

159 About Us,” Semester At Sea.
160 Ibid.
163 “IHP Comparative Programs,” SIT Study Abroad.
an environmental activist. The son of a German-American industrialist who “founded the
world’s largest manufacturer of cement-mixer trucks”164 and owned a coal mine in West Virginia,
Jaeger was “struck by the irony of an environmental activist owning a coal mine”165 and decided
that he would “devote the earnings from the mine to a major environmental initiative.”166 Jaeger
proceeded to create Our Future Planet in 2008, an organization that “aims to be the leading social
network for the environmentally aware,”167 and invites members to engage with a wide range of
issues, including the environment, sustainable living, energy, education, as well as transport and
travel. Similarly, the core values of SIT, as stated on their website, are Community, Intercultural
Understanding, Social Inclusion and Justice, and Sustainability. With this, the organization
specifically states that they “are committed to human and environmental well-being and
contributing to a better world for all living and future generations.”168 It is curious, then, that
Jaeger was not also struck by the irony of students traveling 36,000 miles by plane and motor
vehicle to study climate change. This raises the question of how Jaeger and his team felt they
could justify the obvious environmental detriment that the travel associated with the Climate
Change program (not to mention the six other IHP programs that likely travel just as far as the
Climate Change program) would create.

Evidently, both SIT and Semester at Sea concluded that the benefits of such
trace-intensive semesters outweigh the costs. Besides promoting sustainability, the mission
statements of each organization heavily emphasizes the value of travel and exposure to the

164 James Arnold-Baker, “A Lifetime of Activism,” Resurgence, Accessed March 29, 2020,
165 Ibid.
166 Ibid.
167 Ibid.
168 “Mission and Values,” World Learning Inc.
world; this can be seen through the repetitive use of phrases such as “global community,” “world issues,” “global citizens,” “people from other cultures,” “global perspective,” and “experience-based,” among others. While it remains questionable whether the value of travel justifies the environmental harm inflicted through those actions, the importance of travel throughout history is far from debateable.

The Purposes of Travel Over Time

Though the significance of travel has remained constant, the purposes of travel have changed over time. For example, the earliest form of travel “required a profoundly important purpose,” where physical and economic survival controlled human movement. Even as trade-based cultures developed, cross-cultural travel for purposes other than these didn’t evolve until the dawn of religious pilgrimages. By the late sixteenth century, however, “intellectual curiosity had surpassed pilgrimage as the main motivation behind nonmilitary, noncommercial travel for upper-class Europeans.” What we think of as ‘modern tourism’ is only a very recent development; evolved from an elite and largely English pastime of the seventeenth and eighteenth centuries, the “Grand Tour” was seen as a “rite of passage from childhood to adulthood” during which young men traveled (to France and Italy in particular) “to acquire the social polish that would make them ‘complete’ gentlemen.” Throughout their travels, they were expected to make new connections, and in doing so, often “acquired new manners, clothes,

and habits.” Each family generally set its own itinerary, which depended on family contacts, friendships, and diplomatic relations. The young men spent about two to four years traveling to “sites of cultural achievement,” staying in hotels and villas along the way. While “the experience of living and learning in other countries by itself was seen to have positive values,” the young men also set out to pursue “their own and their family’s social and cultural goals.” With this, “travel itself became an intrinsic part of aristocratic education,” as well as an important expression of wealth and sophistication.

With the onset of the French Revolution and the Napoleonic Wars, the Grand Tour became increasingly rare and was ultimately brought to a halt. This pause did not last long however; when the Tour was revived and began to flourish again in the nineteenth century, it was no longer limited to those from aristocratic or affluent backgrounds, and women also began to take part. Morphing into the “Wanderjahr” (which literally translates to “wander year” from German), this journey usually lasted about a year and consisted “more of experiential learning than academic study.” With no social ambitions or obligations, and no particular scholarly learning planned, “the Wanderjahr meant living to its fullest a youthful life of minimal adult responsibilities.” Instead, “the hope was that [the travelers] would return safely with new maturity and confidence, ready to settle into their pre-ordained social, civic, and familial roles.”

177 Potts, Souvenir, 27.
179 Ibid.
180 Ibid.
Looking ahead to the aftershocks of WWI in the twentieth century, U.S. participation in postwar talks “reflected an expanded sense of its importance in the wider world”\textsuperscript{181} and revived historical bonds with Europe. This brought about a “sense that mobility brought cultural capital and social prestige,”\textsuperscript{182} leading to “strong feelings among well-traveled and educated Americans that you have to live and learn in Europe to be fully educated.”\textsuperscript{183} This sentiment relates to the emergence of study abroad semesters and years being offered at colleges and universities, and the slow but steady rise of students enrolled in such programs. The beginnings of American study abroad programs were “modest in number and impact,”\textsuperscript{184} and “focused on language and cultural immersion programming for foreign language majors and involved mostly female students.”\textsuperscript{185} Significant expansion did not begin until after WWII, in the early 1960s. While some students enrolled directly in universities overseas, most chose to participate in one of three different American models: the Junior Year Abroad (JYA), a faculty-led student tour, or summer study programs. Each of these models “aimed to enrich and diversify undergraduate degree studies through participation in a program of study in a foreign environment,”\textsuperscript{186} and as increasing numbers of institutions sought to replicate this programming, variations on JYA began to emerge. Programs began to develop that included more than just students studying foreign languages, and despite an increase in cost, a marked increase in enrollment rates show that students and their families “continue to value education abroad experiences.”\textsuperscript{187}

\textsuperscript{181} Hoffa, \textit{A History of US Study Abroad: Beginnings to 1965}, 61.
\textsuperscript{182} Zuelow, \textit{A History of Modern Tourism}, 135.
\textsuperscript{183} Hoffa, \textit{A History of US Study Abroad: Beginnings to 1965}, 62.
\textsuperscript{184} Ibid, 21.
\textsuperscript{185} Ibid.
\textsuperscript{186} Hoffa, \textit{A History of US Study Abroad: Beginnings to 1965}, 69.
\textsuperscript{187} Hoffa, \textit{A History of US Study Abroad: 1965 to Present}, 279.
Underlining this is The Institute of International Education (IIE) 2018 Open Doors report, which shows that the number of US students studying abroad for credit during the 2017-18 academic year grew 2.7% from 332,727 to 341,751 students. When considering that only 154,169 Americans studied abroad in the 2000-01 academic year, these numbers show significant growth in the study abroad industry. With this, IIE estimates that about 10.9% of all undergraduate students and 16% of students earning bachelor’s degrees study abroad at some point in their educational careers.\(^{188}\) However, even though the profile of students studying abroad continues to become more diverse, minority students are still greatly underrepresented; about 29.2% of students who studied abroad in the 2016-17 academic year were nonwhite, compared to 18.2% of students in the 2005-06 academic year. While the gap is slowly closing, this clearly does not yet reflect the diversity of enrollment in U.S. higher education, which is about 42% nonwhite.\(^{189}\)

**The Aura of Air Travel**

The sustained popularity of study abroad programs can be traced back to the origins of the Grand Tour, and the value that our society places on travel. Just as young adults embarking on their Grand Tour of Europe sought to elevate their own and their families’ social standing by making personal connections and pursuing their studies in what were considered to be some of the most cultured countries and cities in the world, an important incentive for travelers today is the status that travel, particularly to far-off, seemingly “exotic” places, can grant them. Most of


\(^{189}\) Ibid.
these types of long-haul trips are made by plane, and thus the origins of this phenomenon can be connected to the historic awe and sense of adventure people feel for air travel.

The first commercial airplane flights were “commonly greeted as the heralds of a new age in which air travel would “shorten” distances and contribute to a better and more integrated world.” While Alfred Harmsworth, owner of the Daily Mail and Daily Mirror newspapers in Britain, declared that “England is no longer an island” in relation to the fact that in terms of military attacks from the air, the country no longer benefitted from being surrounded by water, this statement can also be applied to England’s growing connection to continental Europe—flying would eventually make movement between almost any two places in the world easier. As a result, aviation became associated with “technological prowess, superiority, and territorial conquest,” where “having an airline and an airport was a ‘reflection of importance, an opportunity to increase both corporate and national earnings, and sometimes even a way to symbolize national identity.” Just as the Munich Agreement demonstrated how flying had become the norm for political leaders, it also gave air travel a reputation connected to power and prestige. Ultimately, having an airline “was not so much about making money as it was about symbolism and the exercise of power.”

The emergence of flying also led to the development of pilots being regarded as “revered idols,” and thus facilitated feelings of incredible awe and interest from the public towards aviation. For example, in 1909, over 100,000 people “flocked to Paris” to celebrate

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190 Dierikx, Clipping the Clouds: How Air Travel Changed the World, 1.
191 Ibid, 2.
192 Dierikx, Clipping the Clouds: How Air Travel Changed the World, 2.
194 Dierikx, Clipping the Clouds: How Air Travel Changed the World, 131.
195 Ibid, 1.
196 Ibid, 4.
Frenchman Louis Blériot’s flight across the English channel. Flying enjoyed a level of romance through which the pilot emerged as “an airborne knight armed with a machine gun who jousted in the sky,”197 “[risking] his life to overcome seemingly insuperable obstacles through the use of the spectacular technology of aviation.”198 Air shows attracted hundreds of thousands of spectators due to the “anticipation of thrill and the distinct possibility of watching a young pilot’s life come to a sudden end;”199 “mortal danger was one of the prime attractions of aviation, the magnet that brought out the masses.”200 Spectators described how pilots “flew in machines heavier than air. But they smashed. Sometimes they smashed the engine, sometimes they smashed the aeronaut, usually they smashed both.”201 Additionally, pilots were also highly regarded by political leaders; British Airmen John Alcock and Arthur Whitten Brown were knighted by King George V after completing the first flight across the Atlantic from St. Johns, Newfoundland, to Ireland in June of 1919.202 This overall sense of awe is demonstrated by a 1942 Vultee aircraft advertisement describing a pilot as “the man we look up to.” This image can be found in Appendix G.

To add to the enchantment of flying, advertisements emphasized an aura of prestige that fascinated the public. Female flight attendants “were adorned with designer uniforms as if the cabin aisle doubled as a catwalk in the sky,”203 and their uniforms were “contracted out to internationally famous fashion designers such as Christian Dior, Pierre Cardin, Ralph Lauren,

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197 Zuelow, A History of Modern Tourism, 128.
198 Dierikx, Clipping the Clouds: How Air Travel Changed the World, 7.
199 Ibid, 3.
200 Ibid.
201 Ibid..
202 Ibid, 6-7.
203 Ibid, 95.
Mary Quant, Anne Klein, and Nina Ricci. An image of a 1970’s Southwest Airlines flight attendant who could easily be mistaken for a fashion model strutting down the aisle is listed in Appendix H. Additionally, an advertisement highlighting the fact that flight attendants who worked for United Airlines would be wearing uniforms designed by French fashion designer Jean Louis can be found in Appendix I. With this, airlines were “anxious to have their services measured against the standards of a de luxe rail compartment, or a cabin on an ocean liner,” and consequently distributed advertisements depicting celebrities such as movie and pop stars as satisfied customers. In fact, “they appealed openly to the snobbism of their passengers and encouraged the idea that certain types of sophisticated people travelled by plane: businessmen, rich honeymoon couples, fast-moving lawyers, fresh oysters. And when celebrities or royal passengers were carried, the airline never failed to broadcast the fact.”

This can be seen in the way that celebrities were “filmed and photographed in the doorways of shiny passenger jets or underneath their mighty wings.” One prominent example of this is the way in which the Pan American World Airways airline used the Beatles as “live ads, generously supplying them with carry-on bags donning its corporate logo before the 200 reporters and photographers who turned up.” Other icons such as opera star Maria Callas, actor Kirk Douglas, jazz musician Louis Armstrong, actress Katherine Hepburn, and even the Pope were used by airlines to promote business as well.

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204 Ibid.
205 Lyth, “The Empire’s Airway: British Civil Aviation from 1919 to 1939,” 874.
206 Ibid, 875.
207 Dierikx, Clipping the Clouds: How Air Travel Changed the World, 95.
208 Ibid.
In addition to selling tickets, air transport imagery was also used to sell goods, with special emphasis placed on modern luxury goods such as cars, tobacco, clothing, drinks, and perfumes. An advertisement for Ford Motors that links the Ford brand to air travel can be found in Appendix J. An advertisement that links Herbert Tareyton cigarettes to air travel can be found in Appendix K. It is especially interesting to note how these types of ideas affected the public; early passengers could “ask the pilot of their flight for an official, signed certificate to prove to disbelievers they had actually flown,” and for many people “the experience of ‘riding on a jet plane’ became a goal in itself.”

Airports, too, “claimed their share in this glamour.” By the 1950s, airport scenes became a “customary ingredient of stories depicting the life of the affluent,” and to be able to partake in this world “meant to taste something of the modern life as displayed in films, cinema, commercials, and in popular novels, where airports and aircraft featured as symbols of a lifestyle that came with success.” The attention paid to this media corresponded with increasing amounts of people owning cars, and thus becoming much more mobile; as a result, airports and airport terminals themselves became popular spots to visit on outings with family or friends. Eager to catch a glimpse of famous celebrities, or even just watch planes take off and land, masses convened to “cheer the demigods of the modern age as they descended from the clouds.”

For example, over 3,000 fans flocked to the John F. Kennedy International Arrivals building to greet the Beatles as they arrived in the United States for the first time in 1964, and a week

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209 Dierikx, Clipping the Clouds: How Air Travel Changed the World, 95-96.
210 Ibid, 26-27.
211 Ibid, 96.
212 Ibid, 95.
213 Ibid, 56.
214 Ibid, 96.
215 Ibid, 95.
later a four-mile long traffic jam was created by fans desperate to meet them at Miami International Airport; an image of the Beatles at London Heathrow Airport in 1965 shows a mass of fans gathered to catch a glimpse of the band and is included in Appendix L. This frenzy wasn’t unique to the United States; that same year, 350,000 Beatles fans welcomed the band at the Adelaide Airport in Australia, and Paris Orly Airport in France was “registered as one of Paris’ biggest attractions, receiving over 3 million visitors per year who came to gorge on its combination of modernity and richness”\footnote{Dierikx, Clipping the Clouds: How Air Travel Changed the World, 95.} within one year of opening a new terminal in 1961.

**The Value of Travel in Society Today**

Given the demonstrated value of travel over time, it comes as no surprise that travel, and air travel in particular, carries this same merit today. While air travel has become relatively accessible to what we would consider to be the middle class, it is still emblematic of a modern and thriving society and of a well-educated and well-rounded person. This sentiment is demonstrated by present-day advertisements, social media posts and associated articles, as well as scholarly writing.

Today, air travel still benefits from the prestige of being featured in advertisements for luxury goods; for example, in 2015, fashion designer Michael Kors launched a new cologne called “Michael Kors for Men.” The ad campaign to promote this product features a male model described in the tagline as “the ultimate jetsetter,” with a futuristic plane hovering in the distance; this image is listed in Appendix M. Similarly, a 2017 Louis Vuitton traveling exhibit guided visitors through a history of the brand since its founding in 1854; named “Volez, Vogue,
Voyagez”, the title of the exhibit is French for “Sail, Fly, Travel.” The Louis Vuitton webpage announcing this exhibit in New York City describes the brand as making “traveling effortless as well as fashionable,”217 and writes that “a piece of the brand’s luggage has always been the quintessential tool in the jet-set traveler’s arsenal.”218 While the exhibit features several different types of transportation, images of a custom-built biplane serving as a display for the designer luggage were used to promote the exhibit and were widely circulated online. The promotional image for this exhibit can be found in Appendix N. The presence of these campaigns within recent years demonstrate that this marketing tactic of connecting products to air travel in order to invoke ideas of luxury is still prominent today.

With the rise of social media within recent years, it comes as no surprise that an important incentive for travelers today is the status that travel, particularly to far-off, seemingly “exotic” places, can grant them. One author described this particularly well in writing that “acquiring cultural capital through tourism demands going further afield than others, escaping from the maddening crowd.”219 This attitude is reinforced by social media posts and online articles. A quick search online produces articles promising “8 Honeymoon Destinations None of Your Friends Have Thought Of,” “150 Fabulous Vacation Instagram Caption Ideas That Are Almost as Great as Your Travel Pics,” and “23 Off-the-Beaten-Path Experiences for Serious Travelers,” which supposedly offer “deeper, richer, and more fulfilling experiences.”220 Clearly, there is an overwhelming pressure to travel far, and to travel to places that not a lot of other

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218 Ibid.
people have been to. With this, there is an indisputable social pressure to post photos online and share your travel experiences with others; this is a key part of “acquiring cultural capital” today.

This idea is also reflected through the ways in which tourists and travelers think about souvenirs. In *Souvenir*, Rolf Potts argues that souvenir-collecting has developed into a “superficial consumer ritual that [has] little to do with the cultures [people] [visit].”221 Instead, travelers “just want something that proves they’ve been there.”222 Over time, souvenirs have become a way to “[prove] that the owner has gone someplace most people haven’t and gained knowledge that most people don’t possess,”223 essentially “[advertising] the worldliness of the traveler who collected them.”224 This analysis encapsulates many of the ideas mentioned previously, where travelers today are socially rewarded for travel and frequent flying is equated with status that only few can access. These ideas also tie into students’ motivations to study abroad, as the values they have been conditioned to embrace strongly influence their decision-making process.

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221 Potts, *Souvenir*, xvii.
222 Ibid, 63.
223 Ibid, 100.
224 Ibid.
CHAPTER THREE: Analyzing Student Survey Responses

In considering the student survey responses from both SIT and SFS students, six main themes came up repeatedly as students considered their study abroad programs, as well as academic flying in general. Many students commented on the fact that travel in order to discuss the climate was hypocritical, thus recognizing the fundamental tension that this paper explores. Perhaps as a result of this tension, a significant portion of students also admitted that they felt guilty about their own travel for study abroad purposes.

Students also used a few ways to justify their study abroad experience; many described the educational benefits that studying abroad would grant them, especially in terms of becoming a more informed environmental advocate. With this, students also wrote of the importance of travel experiences in their own lives.

Finally, a primary tension arose where students expressed the need to use updated technology to mitigate climate impact, especially in the context of academic conferences, yet also emphasized the need for in-person communication in the fight against climate change.

Key Differences

There are two key differences to note in terms of the study abroad organizations I worked with when thinking about the student responses. First, SIT IHP programs require much more travel, and are thus naturally very carbon intensive, as students move between four continents — with the exception of the IHP Human Rights program, which visits only three continents, but still

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225 It is important to note that much of this analysis was anecdotal and qualitative. I included numbers where possible, however it was outside of the scope of this thesis to complete this kind of analysis throughout. A more extensive quantitative analysis could and should be completed in the future.
travels between four different countries. In comparison, SFS programs are based in a particular
town or city, and, with the exception of a few excursions, students generally remain in-country
and on or near the program center campus once they arrive.

The second key difference to note relates to the academic subject matter of these
programs: all of the SFS programs have a focus on environmental science, whereas the SIT IHP
programs are considerably more humanities-based.

**Hypocrisy**

One of my initial goals in surveying current and past SFS and SIT students who
participated in international and travel-intensive study abroad semesters was to determine
whether or not students were aware of the inherent contradiction embedded in their choice to
apply to and take part in their study abroad program. For the purpose of this analysis, I consider
participation in these undergraduate study abroad programs as participation in ‘academic flying’;
even though students aren’t professionals, they still fly via airplane in order to engage in
academic studies and research. Just as scientists perpetuate the problem they are studying, so too
do these students.

In considering the responses to my first climate-impact question, which read “Did you
ever consider the potential climate impact of your travel when you were choosing your
program?”, it is clear that most students never even thought about the climate impact of their
travel when deciding whether or not to participate in their particular study abroad program. Of
the 190 SFS students who answered this question, 66, or 35% of students responded “yes”, that
they had thought about the climate impacts of their travel, compared to 124, or 65% of students,
who reported that “no”, they had not thought about their potential climate impact when choosing
their program. In comparison, of the 37 students who took part in the SIT IHP survey, 19, or 51% of students, responded “yes” to the same question, and 18, or 49% of students, reported that “no”, they had not thought about the climate impact of their travel when considering their study abroad options. In considering this data together, 85, or 37% of the 227 total SFS and SIT IHP students that I surveyed, thought about their climate impact, while 142, or 63% of the 227 total students, did not consider the climate impact of their travel when thinking about study abroad.  

In comparing the responses of SFS students to SIT IHP students, it is clear that a greater proportion of SIT IHP students thought about the climate impact of their travel than did SFS students; as mentioned previously, while only 35% of SFS students reported that they thought about their travel-related climate impact, 51% of the surveyed SIT IHP students reported that they thought about their climate impact. A possible explanation for this variation is the fact that SIT IHP programs are much more mobile than SFS programs are. Thus, due to the significant amount of travel required by SIT IHP programs, it comes as little surprise that a greater proportion of SIT students thought about the climate impact of their travel. Additionally, while this data demonstrates a relatively significant difference in the thought process between SFS and SIT IHP students when they were choosing their program, it is important to keep in mind that the survey sample size of SFS students was more than five times larger than the survey sample size of SIT IHP students—190 SFS students participated in the survey, compared to only 37 SIT IHP students. It is unclear how or if the results would have changed if more SIT IHP students had participated.

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226 This data is graphed in Appendix O.
With this data in mind, I looked to the written responses of students who had reported that they had thought about the potential climate impact of their travel when choosing their program. Responses to my followup question that read “If yes, how did this impact your decision?” indicated that some of these students were very aware of the hypocrisy that was involved in their choice to participate in these SFS and SIT IHP programs. For example, one student explained how they “wish [they] would have [thought about their climate impact] more, but to be honest [they] didn’t, which is pretty hypocritical,” especially given that they try “to not use plastic or buy new items and eat in a more sustainable way.” Another student reported that they “lived in the irony for a moment, then considered what was best for [themself].” Several wrote that the choice “felt a bit hypocritical,” and one student put it rather bluntly, simply writing “I’m a hypocrite.”

Other SFS students acknowledged the disconnect in more subtle ways, showing that they were aware of the paradox without actually using words like “hypocritical” or “irony”, and justifying their choice based on their specific travel plans. For example, some students reported that they were either looking into buying carbon offsets, or had already bought them to offset their travel. One student described how they specifically “chose Costa Rica because of its closeness to the United States as well as its reputation of being environmentally conscious.” Other students booked flights “with minimal connections and a more direct flight route,”

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27 SFS Program Evaluation, Dec 2019, SFS Question 2, Chile. Following this first SFS survey citation all SFS student responses will be cited as “SFS, [Q #], [Program Name].”. 28 Ibid. 29 Ibid. 30 Ibid. 31 SFS, Q5, Peru. 32 SFS, Q2, Costa Rica. 33 SFS, Q2, Cambodia.
reported that their travel for the semester “deterred [them] from traveling for the rest of the year,” or planned to stay in-country when their program ended, “to travel after so that it was more worth it.” Still others used the length of their program to justify their travel to the program location; one student explained that “since I am here for four months, I believe that helped validate it.” In these instances, students made small changes to their travel habits in order to mitigate some of the environmental impact of their flights.

Still others focused more on the impact of specific lifestyle habits while they were abroad. One student wrote that they were “attempting to do meatless [Mondays] and Wednesdays to offset [their] carbon impact,” and another student used a similar justification, explaining that they “thought about trying to offset the carbon from [their] flights, but [they] don’t eat meat in America, and that has [a] greater impact than not flying.” Some focused specifically on their lifestyle during the program, revealing that they chose to not take trips into town in order to reduce driving, used only eco-friendly products, or made other kinds of choices to “be more conscious than usual” while they were abroad. In explaining their initial choice to study abroad, students also relied heavily on the fact that they would likely produce far less waste while on-site, which made them “feel better about [their] impact.” This sentiment was reflected in one particular student’s response. They wrote:

“I felt better about coming to Peru because I knew that my local impact would be a lot smaller, with less traveling, need for electricity, and no air-conditioning or

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234 SFS, Q2, Bhutan.
235 SFS, Q2, Cambodia.
236 SFS, Q2, Tanzania.
237 SFS, Q2, Cambodia.
238 Ibid.
239 SFS, Q2, Panama.
240 SFS, Q2, Australia.
need for heating. I was specifically hopeful about having access to locally-sourced food.”

Ultimately, leading a more environmentally-conscious lifestyle during their semester abroad was one of the primary ways in which students acknowledged the impact of their travel, and in some cases, served as a way to justify their decision to participate in the first place.

While students were clearly not oblivious to the fact that traveling thousands of miles via airplane to study environmental or climate sciences was hypocritical, not nearly as many addressed the irony on their own accord and in relation to their own choices, as did when asked a more pointed question that didn’t relate directly to their experience. Perhaps the question that I got the most lengthy and detailed responses to called climate scientists out directly for the dissonance between their actions and words. It read: “Earlier this year, at the World Economic Forum in Davos, Switzerland, environmental activist Greta Thunberg expressed how she thinks ‘it is insane that people are gathered here to talk about the climate and they arrive here in private jet.’ How would you respond to this?” It is important to note that due to the nature and method by which I was able to survey students, the question posed to SIT IHP students was a bit more pointed, as the final phrase of the question read “How would you respond to this in the context of your own IHP program”, instead of “How would you respond to this?”

While the responses to this question were not easily quantifiable, I did find that 134 of the 175, or 77% of SFS students who provided a response, generally agreed that Thunberg made a valid point and acknowledged the irony that she addressed. Similarly, 24 of the 36, or 67% of the SIT IHP alums who answered this question, also agreed with Thunberg’s message. Despite agreeing with Thunberg at a most basic level, however, most students defended their own actions

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241 SFS, Q2, Peru.
and choices to study abroad. Several respondents pointed out that they themselves did not fly via private jet, and therefore “fail to see the relevance of the question to [their] educational experience.” While this is certainly an important and fair difference to highlight, it was interesting to note how students immediately separated themselves from climate scientists and political leaders in order to justify their own actions, even though they were engaging in similar types of travel, for similar purposes; in fact, one student even wrote that their “gut reaction [was] to excuse [themselves]” from Thunberg’s criticism. This point remained relevant throughout the entire analysis, and will be expanded upon later.

**Guilt**

Perhaps as a result of their awareness of the paradox, a significant portion of students admitted that they felt guilty about their own travel for study abroad purposes. For some, this guilt had seemingly little or no effect on their choices. For example, one student described how “it didn’t change how I traveled, but I felt a little guilty doing it,” and another explained that “I think I felt a bit of guilt, but I also knew that I would probably not be able to get here any other way.” Unsurprisingly, these initial feelings of guilt did nothing to deter students from participating in such extensive travel; ultimately each survey participant made the choice to fly internationally at least twice, but more realistically probably 4 to 6 times when considering layovers. In the case of SIT IHP students, this number is likely to be at least double that of SFS

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242 SFS, Q5, Bhutan.
243 IHP Student Perspectives survey, Google Forms, Dec 20 2019 to Jan 27, 2020, SIT IHP Health and Community program. Following this first SIT IHP survey citation all SIT student responses will be cited as “SIT IHP, [Program Name]”.
244 SFS, Q2, Tanzania.
245 Ibid.
students, as program participants journeyed to three countries outside of the United States, and, due to the distance between them, rarely flew direct.

Students described how, even once in the field, feelings of guilt permeated their experience. One SIT IHP student reported that their cohort “mostly just talked about how [they] felt bad but there wasn’t much [they] could do about it,”246 and an SFS student wrote that even though they would enjoy their time abroad and the memories they made, they couldn’t “shake the guilt.”247 Clearly, studying abroad weighed heavily on many of the students, with one even describing the experience as “the most wasteful thing I have done in a while.”248 These particular students did not describe whether this guilt affected their life in any other way.

For others, however, this guilt manifested in other actions in an attempt to offset their carbon footprint. Students participating in the SIT IHP Human Rights program “brainstormed ways to make [their] own lives more environmentally friendly at home,”249 and “all bought metal straws, and in Amman, Jordan, [they] requested a recycling program.”250 One SFS student described how “it weighed on me that I was burning so much fossil fuel to fly over here, so I bought carbon offsets with my ticket to help a little bit.”251 Similarly, another SFS student “made sure to take more fuel efficient aircraft throughout [their] journey, including a 787-9 on two legs of [their] journey;”252 according to Boeing, the 787-9 aircraft features “unparalleled fuel efficiency.”253

246 SIT IHP, Climate Change.
247 SFS, Q5, Chile.
248 Ibid.
249 SIT IHP, Human Rights.
250 Ibid.
251 SFS, Q2, Australia.
252 SFS, Q4, Bhutan.
With this, students across the board made efforts to be environmentally conscious during their time abroad as a direct result of discussions about their climate impact with professors, staff members, and their peers over the course of their semester. Responses to the question “Did you think about or discuss your climate impact over the course of your study abroad experience?” revealed that 140, or 74%, of the 190 SFS students who answered this question had discussed their climate impact over the course of their semester abroad, while 50, or 26% of students, reported that they had not. Similarly, of the 35 SIT IHP students who answered this question, 29, or 83% of students, reported that they had discussed their climate impact, while 6, or 17% of students, reported that they had not. In considering this data together, 169, or 75% of the 225 total students who answered this question, reported that they thought about or discussed their climate impact over the course of their semester abroad. When asked to elaborate on the nature of these discussions, as well as any outcomes, students described conversations that focused on how to live more sustainably at their program centers in order to lower their impact. While these responses were not explicitly tied to guilt, I do not find it unreasonable to assume that a desire to offset travel impacts was tied to an underlying feeling of wrongdoing or guilt. In fact, this seems very likely that these types of feelings were factors in prompting these lifestyle changes, especially because the majority of students reported having conversations about their climate impact while they were abroad.

For example, SFS students in Australia made a pact to avoid using the dryer and to limit their showers to five minutes, and SFS students in Peru discussed their energy usage on campus and the environmental effects of taking a mototaxi into town. Students on the SIT IHP Cities in

254 This data is graphed in Appendix P.
the 21st Century program implemented water saving strategies into their daily routines in Cape Town, South Africa, such as “not flushing, showering in a bucket, how to save water doing dishes,” and SFS students in Bhutan measured the carbon footprint of their semester using an online calculator, leading to personal reflections on students’ climate impact at home, especially in terms of the waste that they produce. Perhaps most engaged in conversations about their environmental impact, were SFS students abroad in Panama and Turks and Caicos; students from both programs wrote about a club that they participated in called “Climate Pirates”. These weekly meetings were used to “discuss various climate related topics,” “[collaborate] to come up with many different ideas on how to reduce [their] impact [on campus] and back home,” and help students “make more informed decisions.” With this, students in Turks and Caicos were awarded points if they made efforts to mitigate their climate impact, which worked to “motivate [students] more to clean up trash, turn off lights, etc.” Ultimately, it seems that students were aware of their climate impact, and felt it necessary to reduce their environmental footprint during their semester abroad.

Despite these feelings of “immense amounts of guilt,” however, students also emphasized that they would make the same decision to travel and study abroad again if they had to. Two students in particular were especially upfront about their points of view. An SIT IHP student explained that “while I feel deeply guilty over my contribution to climate change, I do not regret my study abroad experience and hope to pay back my debt to the world and planet

255 SIT IHP, Cities in the 21st Century.
256 SFS, Q4, Turks and Caicos.
257 Ibid.
258 Ibid.
259 SFS, Q2, Chile.
over the course of my life and career.” Similarly, an SFS student wrote that “I feel bad about my travel, but also I wouldn't trade this experience and I hope that I can [outweigh] those [impacts] in other ways.” These types of responses show that despite feeling remorseful about studying abroad due to the climate impacts, students found ways to justify their travel that ultimately made them feel confident in their decision.

**Educational Benefits**

By far the most popular way that students justified their travel was by emphasizing the benefits of the educational experiences they took part of while abroad. Not only did students describe the importance of experiential learning, but also the significance of becoming a more informed environmental advocate, to both themselves, as well as the larger global community.

The potential impact of experiential learning on a students’ personal life and career was emphasized by students over and over again. Several students brought up the fact that they never would have been able to have the same kind of immersive educational experiences at their home institutions. For example, one SIT IHP student wrote that they “would not have been able to learn 25% of what [they] did during [IHP] if [they] hadn’t been in the physical country.” Similarly, another SIT IHP student described how “more was gained by this trip than could ever have been learned from the hub of my private liberal arts campus in SoCal.” These types of responses point to the importance of the travel component to student’s learning experiences, as

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260 SIT IHP, Health and Community.
261 SFS, Q5, Australia.
262 SIT IHP, Health and Community.
263 SIT IHP, Social Innovation.
students felt that they would not have benefitted from the curriculum in the same way if they had remained on campus.

An overwhelming number of students explicitly wrote that they believed that their climate impact was justified because they were traveling for the purpose of education. While the way in which students addressed this varied, the overall message that they put forth was consistent: “the experience [of studying abroad] would contribute to [their] education greatly enough that the climate impact was justified.” Students described how they “considered [their] education and investment” and concluded that “the knowledge would be worth the emissions;” ultimately they decided that “the value of the educational experience outweighed the individual impact of the flights.” With this, some students also acknowledged that they were “privileging [their] learning over [their] climate change impact,” explaining that overall, “education could be the best reason to justify flying, though is still obviously not great.”

Many of the students that addressed the educational benefits of studying abroad also argued that their program experiences would lead to future changes that may ultimately outweigh the carbon footprint of their current travel and would have a positive impact on the collective battle against climate change. One key theme that was brought up in several different ways was the idea of a “net positive”, or a future benefit of studying abroad— specifically in terms of the environment. For example, many students believed that studying abroad through SFS or SIT would make them a “more informed science student and more adequately prepared to address

264 SFS, Q2, Tanzania.
265 SFS, Q2, Australia.
266 SIT IHP, Climate Change.
267 Ibid.
268 SIT IHP, Health and Community.
269 Ibid.
climate change in the future, therefore having a net positive.\textsuperscript{270} More specifically, students described how “the impacts [of their] choice would in some ways be mitigated by the fact that [they] were learning about ways to be a better environmental citizen,”\textsuperscript{271} and would “be able to make more conscious decisions”\textsuperscript{272} moving forward. This seemed especially important when considering the scale of the programs; a number of students pointed out that each semester created, for example, “22 smarter environmental advocates who will make large scale change later in life,”\textsuperscript{273} or “23 young individuals who can go forth with this knowledge and use it to change the current system we operate in.”\textsuperscript{274}

In surveying the SIT IHP alumni, I was able to include a few additional questions about their experiences while they were abroad. One of these questions read “What were your most meaningful educational experiences of the semester?” In considering the student responses to this question, there were three types of experiences that seemed to stand out from the rest in terms of their educational benefits: eighteen of the thirty-seven students who answered this question wrote that engaging with local communities and leaders were among the most meaningful educational experiences of their semester, fourteen students reported that they were most impacted by site visits, and nine students mentioned homestays as being one of their most significant learning experiences.\textsuperscript{275} Other types of experiences that were mentioned included individual field work and research projects, as well as participating in courses taught by local guest lecturers. Here, it is interesting to note that the three educational experiences that students

\textsuperscript{270} SFS, Q2, Tanzania.
\textsuperscript{271} SFS, Q2, Peru.
\textsuperscript{272} SFS, Q5, Turks and Caicos.
\textsuperscript{273} SFS, Q4, Australia.
\textsuperscript{274} SFS, Q4, Chile.
\textsuperscript{275} This data is graphed in Appendix Q.
reported as being most meaningful all involved being in that specific location; engaging with local communities, participating in site visits, and living with host families are all actions that require a physical presence and do not translate well to the lecture-style of teaching and learning.

**Importance of International Travel Experiences**

The second most common way that students justified their study abroad experience was by emphasizing the importance of international travel experiences in their own lives. For some students, this feeling started and ended with a desire to see the world, and often came across in a sarcastic or defensive manner. This can be seen in the way that two SFS students responded to the final survey question that referenced Greta Thunberg.\(^{276}\) One student’s response read as follows:

> “i will not let climate change stop me from living. i don't travel by plane often and i do my best in other ways to minimize my impact on climate change. if there was another way, if i had the power to charter a [yacht] from new york to portugal like greta thunberg, i absolutely would, but my resources are limited and i still would like to see the world while it still exists.”\(^{277}\)

While this student does address their climate impact, they focus more on ‘living’ and ‘seeing the world’ than on the educational benefits of their travel, or the power of understanding another community’s point of view, as many other students did. This kind of response was reiterated by another SFS student, who asserts that they “apologize for traveling halfway across the world to make new memories and experience one of the greatest countries I have ever been to;”\(^{278}\) the

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\(^{276}\) See SFS Question 5 in Appendix C or SIT IHP Question 7 in Appendix D for reference.

\(^{277}\) SFS, Q5, Cambodia.

\(^{278}\) SFS, Q5, Australia.
sarcasm in this response is difficult to ignore, as is the weight placed on the “experience” of traveling abroad to visit a new country.

For other students, however, international travel experiences were seen as key to being able to better understand other peoples’ points of view. Students described how “traveling is an important aspect of everyone’s life” and that “it is still important for people to see other parts of the world to change their perspective.” With this, “experiencing a new place and different culture” was reported to have a “tremendous impact” on a person’s life, especially in terms of being “more understanding and well rounded when it comes to analyzing critical questions.” Here, some students brought up the role that the impact of their travel had on their decision to study abroad; they recognized the difficulty of balancing the “desire to travel and see the world as a route to understanding climate impacts in different parts of the globe while knowing that the travel is highly detrimental to the planet,” but ultimately came to the conclusion that “sometimes, it’s necessary to have to contribute to the negative climate impacts to truly understand the perspective of another country.” In this case, students clearly prioritized their desire to travel over their desire to lead a sustainable life.

In addition to asking the SIT IHP students about how they thought about the climate impact of their travel, I was able to include a few questions about their overall study abroad experience. One of these questions read “What were the top three reasons you chose that particular program? What made you choose this program over others?” Of the thirty-seven

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279 SFS, Q5, Bhutan.
280 SFS, Q5, Bhutan.
281 SFS, Q5, Tanzania.
282 Ibid.
283 SFS, Q5, Costa Rica.
284 Ibid.
responses to this question, twenty-nine students indicated that the subject matter or topic that
their study abroad curriculum focused on was one of the top reasons for choosing their particular
program. Interestingly, the next two most frequent reasons that students reported as being key to
choosing their IHP program were both travel-related; twenty-five students wrote that being in
more than one place for the semester, or the multi-country, multi-city nature of the IHP
programs, was one of the main draws to their program, and fifteen students explained that they
were particularly interested in one or more of the locations that their IHP program traveled to.285
Many students emphasized that they “wanted to see as much of the world as possible”286 and
viewed their semester abroad as an opportunity that they wanted to “make the most of.”287 This
data demonstrates the role that travel experiences played when students considered what kind of
study abroad program they wanted to enroll in. Clearly, the opportunity to see different parts of
the world, and engage in a travel-intensive program were major factors in attracting students to
their chosen study abroad program.

With this, some important issues of access came up in student responses. For many
undergraduate students the cost of studying abroad is subsidized by their home institution’s
financial aid program, where students and their families pay their home institution what they
would for a normal semester on campus, and the home institution in turn pays the study abroad
organization for that students’ participation in their program. In this way, a students’ financial
aid is transferred to their study abroad program in order to make these types of experiences more
accessible to students who would have been prevented from participating due to financial
constraints. As a result of this and similar policies, some students described how they felt the

285 This data is graphed in Appendix R.
286 SIT IHP, Health and Community
287 Ibid.
need to take advantage of studying abroad due to the lack of access to travel experiences in their everyday lives. This point seemed especially relevant to several SIT IHP students, who felt that they may never again be able to engage in the kind of travel that multi-country programs facilitate. For example, one student pointed out that “I felt guilty about it but I’ve also had little opportunity to travel internationally in my life, and I figured getting all around the world in the way the program offered could be enough for a long time.” Similarly, another student wrote about the impact that access had on their study abroad decisions, as well as considerations of the climate impact of their travel: “I still chose this program because I knew that this would likely be my only opportunity to travel internationally, possibly ever. If travel was something I had more access to and would be engaging in more, I might have thought about it more.” These types of responses show that the value of being able to travel extensively during a study abroad experience might be especially magnified for more financially-disadvantaged students.

**Need for Updated Technology**

Students also emphasized the need to use updated technology instead of traveling en masse to academic conferences. For example, many students brought up the idea of connecting via audio and video chat platforms, such as Skype, FaceTime, and Google Hangouts. One student encapsulated most other responses relating to this topic by describing how

“telecommunication technology is improving every day — organizations already use Skype/Facetime/Google Hangouts for mass conferences, which could be utilized for international gatherings and COP climate accords. And technology is getting better... we could soon have virtual reality conferences where UN delegates put on a VR headset and can meet face-to-face in virtual space. Technology is improving and so VR could, in theory, facilitate an even more democratic space for conflict resolution and deliberation... but only if used

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288 SIT IHP, Climate Change.
289 SIT IHP, Health and Community.
responsibly. Yet, I look forward to the days where we will have solar-powered airplanes and we can travel by air without contributing to our climate crisis!" 290

With this, other students specifically emphasized that these types of technologies “should be more utilized in the future,” 291 and “can facilitate the meetings just as well.” 292 Ultimately, students felt that “with the technology we have available there is no need for everyone to fly around the world to attend a conference,” 293 and that progress should be made to create an online forum that people are able to access from around the world, thus eliminating the need to travel long distances in order to meet in person. Here, it is especially important to note that in providing these responses, students were focused on traveling for academic conferences, not traveling for the sake of studying abroad. This discrepancy will be further addressed in the following section.

**Need for In-Person Communication**

This emphasis on the need for the use of updated technology allows for an interesting analysis, as one of the key topics students wrote about in regards to the main draws of their programs is the fact that study abroad allows for in-person communication, which students deem necessary to making effective changes.

While students acknowledged the environmental harm that flying via airplane causes, they also highlighted the importance of meeting face-to-face, explaining that “collaboration and the spread of environmental knowledge is extremely important,” 294 and that meeting in person is

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290 SIT IHP, Climate Change.
291 SFS, Q5, Bhutan.
292 SFS, Q5, Cambodia.
293 SFS, Q5, Panama.
294 SFS, Q5, Australia.
crucial in order to “spread the word.”\textsuperscript{295} With this, many students wrote that the initial sacrifice in terms of carbon output was worth the potential progress that could be made by bringing people together to discuss solutions to the climate crisis. For example, an SFS student expressed that “the desire to learn and change habits must start somewhere and if it starts with flying in a private jet but results in people learning about how they can change the planet, so be it. Gathering people together for change is the most important thing we can do.”\textsuperscript{296} Other students reiterated this idea, writing that “it’s unfortunate that [these gatherings] come at the cost of high-emission travel, but it’s necessary to gather world leaders and create goals,”\textsuperscript{297} and that “the potential positive changes stemming from a presence of environmentalists at such an event is likely worth the cost.”\textsuperscript{298} One student in particular recognized “that so much can happen digitally,”\textsuperscript{299} but followed this up by emphasizing that “so much social organizing happens in person,”\textsuperscript{300} ultimately questioning what the other options are— “Not talk?” Not share? Not exchange ideas?\textsuperscript{301}

In considering these points in conjunction with the points made about the need to use updated technology mentioned in the previous section, it becomes evident that these students do not see themselves as similar to the scholars they are criticizing; instead, students draw a clear line between themselves and academics who are traveling to attend conferences in order to discuss climate change. Even though the surveyed students emphasized how “ridiculous”\textsuperscript{302} it is

\textsuperscript{295} Ibid.
\textsuperscript{296} SFS, Q5, Tanzania.
\textsuperscript{297} SFS, Q5, Chile.
\textsuperscript{298} SFS, Q5, Peru.
\textsuperscript{299} SIT IHP, Social Innovation.
\textsuperscript{300} Ibid.
\textsuperscript{301} Ibid.
\textsuperscript{302} SFS, Q5, Chile.
for scholars to travel to these kinds of events, only one student expressed the need for technology in facilitating study abroad programs that study these same issues; they explained how they “learn a ton by being able to visit another place”\textsuperscript{303} and “believe that we should figure out how to subsidize technology that enables such a meaningful learning experience to be sustainable.”\textsuperscript{304} This student also pointed out that “the [technology] exists, we are just slow at developing and implementing it at scale.”\textsuperscript{305}

Other survey participants, however, pointed to a key difference between students and other academics. Many described this difference as stemming from the purpose of their travel, concluding that the overall ethicality would “depend on what people are traveling for.”\textsuperscript{306} More specifically, students argued that “the difference is that those people are going to just talk and we are coming here to learn so we aren’t the people just talking.”\textsuperscript{307} Here, it is especially interesting to note the specific word choice this participant employs: using the pronoun “those” to refer to individuals attending conferences very intentionally separates students (or “we”) from other academics. In a similar vein, an SIT IHP student pointed out that “hundreds of billionaires flying in private jets to an exclusive location to talk to other billionaires for a few days is very different than a group of students flying economy to conduct research in environments and hear from people they would never otherwise be exposed to.”\textsuperscript{308} With this, it is important to consider that the question this student was responding to specifically called out individuals who traveled via private jet in order to attend the World Economic Forum.\textsuperscript{309} While these billionaires are clearly

\textsuperscript{303} SIT IHP, Social Innovation.
\textsuperscript{304} Ibid.
\textsuperscript{305} SIT IHP, Social Innovation.
\textsuperscript{306} SFS, Q5, Turks and Caicos.
\textsuperscript{307} SFS, Q5, Tanzania.
\textsuperscript{308} SIT IHP, Climate Change.
\textsuperscript{309} See SFS Question 5 in Appendix C or SIT IHP Question 7 in Appendix D for reference.
not the same as the academics I am more closely considering in this project, this response still points to the prioritization of learning and research over in-person meetings and discussions, where students think of themselves as “a slight exception”\textsuperscript{310} and “exempt [themselves] from responsibility.”\textsuperscript{311}

\textsuperscript{310} SFS, Q5, Tanzania.
\textsuperscript{311} SIT IHP, Health and Community.
CONCLUSION: Looking Ahead

In planning for this thesis, I anticipated being able to group student survey responses into just two overarching categories: the pros and cons of studying abroad. This strategy took over my early analysis and writing process, as I struggled to determine how to sort responses into these two buckets and then break each one down according to themes that students brought up. After countless evenings spent rereading and reorganizing student responses, and later rewriting those very sections that I had struggled even to outline, it became increasingly clear to me that the data I had gathered was not going to fit neatly into pro and con chapters, no matter how hard I tried to frame it that way. It wasn’t until a peer review session with other STS majors that I fully realized what this meant: the choice to partake in study abroad is far more complicated than whether or how much an individual cares about the environment versus their own education. The choice is messy, and embodies more than just the measure of a carbon footprint or a need to fulfill credit requirements. Students grapple with lived experiences, societal pressures, feelings of excitement and wanderlust, guilt and responsibility, as well as a range of other emotions that all work together to shape their own individual world views and study abroad decisions. Ultimately, there is a lack of binary and an abundance of gray area; one SIT IHP student addressed this perfectly in writing that they “don't think this is a yes/no, black/white, fly/don't fly”\footnote{SIT IHP, Social Innovation.} situation. Instead, each choice is highly individualized and catalyzes a complex and multifaceted analysis.

Tying into this messiness is the question of whether the benefits of these study abroad experiences outweigh the environmental costs of the travel required. While it would
theoretically be possible to calculate the carbon footprint of a students’ semester abroad versus the carbon footprint of their semester had they stayed on their home institution’s campus, it becomes nearly impossible to make these kinds of calculations when considering the full effect that their time abroad might have on their life, as well as on the lives of others. For example, of the thirty-six SIT IHP students who answered the question “As an alum, did your IHP experience have an impact on the career path you pursued/are pursuing?”, twenty-eight, or 78% of respondents, indicated that their IHP program impacted their career path, seven, or 19% of respondents, indicated that their IHP program did not impact their career path, and one, or 3% of respondents, reported that they were unsure if their experience abroad would impact their career path.313 With this, two of the seven students who responded “no” explained that while their IHP program experience had not impacted their career path, it had impacted their personal life and lifestyle habits. Students brought up a variety of specific ways in which their IHP program had impacted their life, including making them “more determined to fight climate change at home,” participating in “climate organizing in much of [their] spare time,”315 “pursuing climate work/NGOs in Washington, D.C.,”316 and “encouraging [them] to adopt more conscious practices”317 when they returned to the United States. When considering all of the student cohorts who travel through programs like SFS and SIT IHP each year, the potential to produce thousands of highly-educated individuals who are more likely than before to become active in climate organizing or adjust their personal habits becomes apparent.

313 This data is graphed in Appendix S.
314 SIT IHP, Climate Change.
315 Ibid.
316 SIT IHP, Health and Community.
317 Ibid.
In the long run, these kinds of positive outcomes may be more impactful in terms of advocating for change and mitigating individual climate impacts than choosing to forego a semester abroad due to an increased carbon footprint would be; in a sense, “travelling by air with the larger purpose of helping the environment through education, conservation etc. [could be] more important than not buying a plane ticket.” In addition, it is important to consider that, out of all members of society, students may be the most deserving of creating these large carbon footprints; as young adults, they are reasonably impressionable and still in the process of forming opinions and habits that could be positively influenced by an immersive experience. Given this, education may be the best excuse for carbon-intensive travel, and allowing students to partake in such activities could be seen as an investment for the climate movement, where making sacrifices today could have a cascading effect and lead to major policy changes in the future. Despite these opportunities for mitigation, however, I hesitate to argue that this potential to one day outweigh travel choices justifies the actions of students today. While the potential to mitigate these harms exists, it will not necessarily be the case that every student experiences the transformative effect necessary for these types of changes. The possibility also exists that students could have this type of transformative effect without studying abroad; in this case, the environmental impacts of this travel could be even more devastating. In recognizing this lack of clarity, I instead argue that students need to be better educated about the impact of their choices long before their travels, and that their home institutions have a responsibility to initiate these conversations.

318 SFS, Q5, Panama.
Over the course of this project, it became apparent that students wrestle with tough social choices that they might not even be aware of as they think about their undergraduate experience—like we saw, over 60% of surveyed students never even thought about the climate impact of their travel, or what implications that may have. This points to a level of technological somnambulism, where students consume study abroad programs without thinking critically about their choices or questioning the overall concept. Here, it is again important to note that nationally, only 10.9% of all undergraduate students spend a semester abroad; in comparison, 39% of Vassar’s Class of 2017 studied abroad. Other similar institutions report comparable rates; for example, Wellesley College sends approximately 45% of each graduating class abroad, and Amherst College facilitates experiences abroad for about 43% of each graduating class. This pattern indicates the presence of a distorted bubble, where students at certain institutions—for example liberal arts colleges—tend to study abroad at a higher rate than students at other types of institutions. In these cases, studying abroad is widely accepted as a ‘normal’ part of college and, based on personal experience, conversations about planning these semesters can focus less on whether students will study abroad, and more on where they will choose to go. Just as Winner describes individuals as “sleepwalking” through their interactions with technology, so too do these students sleepwalk through the process of studying abroad, with little attention paid to alternative options or the consequences of their choices.

This somnambulism should not come as a surprise due to ties between travel and social and cultural capital. From a young age, Americans are exposed to advertisements and images

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depicting air travel as essential to living a successful and luxurious life, and these kinds of ideas are ingrained in students as they think about ways to enrich their undergraduate experience. The impact that these kinds of messages had in shaping society’s early perception of air travel is undeniable, as is their present-day influence on social media, where air travel continues to be associated with class and celebrity-status. While the effects that these concepts have on study abroad students is less easily measured, due in part to the fact that they may not always be conscious parts of the decision-making process, but instead part of a deep-rooted value system, it is clear that these ideas did in fact inform some students, who recognized this “current infatuation with travel and the vanity included,” and explained that this tension is “very complex and intertwined with conceptions of adventure and exploration that are [ingrained] in our society.” Ultimately, these values play a role in influencing students’ decisions.

In acknowledging the presence of this somnambulism, I argue that changes need to be made in terms of how these types of programs, as well as institutions like Vassar, address these tensions. Ideally, organizations like SIT and SFS would engage prospective students in conversations regarding issues of sustainability pertaining to their programs so that students can make fully informed decisions when deciding whether they want to participate. With this, however, I recognize that these changes may never come to fruition due to the fact that these types of conversations would not benefit study abroad organizations in terms of enrollment numbers and tuition paid. Knowing this, it becomes all the more important for home institutions to hold themselves accountable for the choices their students make, especially seeing as they have no economic ties to these third-party organizations. Ultimately, students should grapple

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322 SFS, Q5, Chile.
323 SFS, Q4, Chile.
with these tensions prior to enrolling in study abroad programs and long before they actually leave for their semester abroad; these discussions should not be left for students to initiate on their own or to discover post-program.

Currently, Vassar does not attempt to promote any kind of reflexivity in terms of being environmentally conscious when students apply for permission to study abroad or choose their program. In reflecting on my own experience, I realized that throughout the entire application process, I never had a conversation with anybody in the Office of International Programs. I did meet with an STS professor to get more information about whether or not SIT IHP credits could count towards my major, and during that conversation they briefly mentioned that the IHP programs were very carbon-intensive and that that was something I would need to consider when making a decision. This, however, was quickly brushed aside and was the last time that I thought about the tension until I had committed to the program and received the itinerary. Looking back, I would have appreciated having a conversation with a member of the Office of International Programs, or at the very least been presented with a more powerful disclaimer. For example, one SIT IHP alum explained how they are now a college advisor and “caution [their] students away from short term study abroad experiences” due to the environmental harm that these types of programs cause. While I can’t pretend that a more formal conversation about IHP semesters would have necessarily changed my mind about applying for the Climate Change program, it is likely that I would have considered other options if I had been aware of the extent to which IHP programs can be harmful. Additionally, I would have benefitted from hearing a critical take on the program, as the main sources of information I had were SIT’s website and

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324 SIT IHP, Human Rights.
glossy brochures, which are clearly meant to entice students, not warn them of potential drawbacks. With this, there is a clear need for Vassar to initiate some of these conversations and begin to unpack these tensions with students as they navigate the process and consider their choices.

Not all of this burden can fall on home institutions, though. Looking ahead, it is also important that study abroad organizations consider how they are going to address the climate impact of their programs, as well as evaluate how effective their programming is. Students from both SIT and SFS programs questioned the intentions of the organization they traveled with. For example, SIT students wrote that they were “surprised [they] don’t hear about SIT’s recognition of its ecological footprint,”\textsuperscript{325} and would “love to see that being addressed in part by recognizing the climate cost of international travel and the study abroad industry.”\textsuperscript{326} They also expressed the need for a “critical analysis”\textsuperscript{327} by both SIT and students “of whether the experiences and benefits derived from time abroad will come out to create enough positives to outweigh the costs of emissions.”\textsuperscript{328} Similarly, an SFS student asked whether SFS purchases carbon offsets and questioned whether the organization has “thought about doing something to offset the fact that [they] in some part motivate young people to fly across the world for [their] programs.”\textsuperscript{329}

With this, four IHP alumni raised concerns about the number of flights that IHP programs require staff and students to take, which I found significant, especially because this was not something that I explicitly asked survey participants about—these alumni brought this concern up of their own accord. These respondents described how they had layovers in “places that were

\textsuperscript{325} SIT IHP, Human Rights.  
\textsuperscript{326} Ibid.  
\textsuperscript{327} SIT IHP, Food Systems.  
\textsuperscript{328} Ibid.  
\textsuperscript{329} SFS, Q5, Bhutan.
really out of the way,”“flew] some crazy routes to get from country to country that were definitely not the most direct,” and “thought that some of [their] program flights were maybe unnecessary.” Several of these alumni acknowledged that cost was a factor in booking these package flights, but expressed that they “wish that the SIT organization would prioritize environmental impact over cost when booking flights for 30+ people.”

These thoughts align with my own uneasiness about the flight path that my cohort embarked on; our journey from Morocco to Bolivia took us three days and four long-haul flights to complete, with two of the three layovers lasting ten or more hours, and our time in Bolivia was punctuated by flights back and forth between La Paz and Cochabamba. Even though I was aware that the IHP Climate Change program would involve much more travel than other types of study abroad experiences, I was shocked when we first received our flight itinerary, and it immediately became clear to me that sacrifices in terms of our time and carbon footprint were made for the sake of cost. Although I understand the need for SIT to keep the program costs low in order to make the program as accessible as possible, I think it is just as important for the organization to plan their programs according to their self-proclaimed mission of creating a more sustainable world. At least in the case of the Climate Change program, several flights and day-long driving trips could be eliminated by simply rearranging the program itinerary. While making these small adjustments is unquestionably not enough to justify such programs, this would be an easy first step to making a change.

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330 SIT IHP, Cities in the 21st Century.
331 SIT IHP, Health and Community.
332 SIT IHP, Climate Change.
333 SIT IHP, Health and Community.
Ultimately, it is my hope that students, faculty, and administrators take these considerations to heart and make the kinds of changes necessary to adapting our current global climate circumstances. As with any endeavor, a collective effort is essential to making the most effective changes, and I challenge every traveler and student to think critically about their choices and the kinds of impacts they may have on the rest of the world.
**Appendix A:** Itinerary and travel miles information  
“All “→ all 34 students and staff members, “Some” → a smaller subset of the entire group

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**Total Distance (mi)** 35,734.6
Appendix B: SIT IHP Climate Change Program’s Emissions

This is a graph of the SIT IHP Climate Change Program’s CO2 Emissions in Metric Tons in comparison to the average emissions produced by people in the countries we traveled to. This graph was presented to us in a Powerpoint presentation on the first or second day in San Francisco, CA.

This graph is not available online. The Powerpoint presentation was sent to me per my request by an SIT Assistant Program Director.
Appendix C: SFS student survey questions

These are the climate-impact related questions that SFS included in their post-program evaluation surveys and that I received student responses to.

1. Did you consider the potential climate impact of your travel when you were choosing your program? (yes/no)
2. If yes, how did this impact your decision? (short answer)
3. Did you think about or discuss your climate impact over the course of your study abroad experience? (yes/no)
4. If yes, please elaborate on the nature of the discussion, as well as any outcomes. (short answer)
5. Earlier this year, at the World Economic Forum in Davos, Switzerland, environmental activist Greta Thunberg expressed how she thinks “it is insane that people are gathered here to talk about the climate and they arrive here in private jet.” How would you respond to this? (short answer)
Appendix D: SIT IHP student survey questions

These are the questions that I included in my Google Forms survey that SIT sent out to IHP alumni from 2019-2017 programs. Note that all responses were in short answer form.

1. Which study abroad program did you participate in? (Name, year)
2. Assuming you traveled by plane, which airport did you depart from to get to your program launch location?
3. What were the top three reasons you chose that particular program? What made you choose this program over others?
4. What were your most meaningful educational experiences of the semester?
5. Did you consider the potential climate impact of your travel when you were choosing your program? If yes, how did this impact your decision?
6. Did you ever think about or discuss your climate impact over the course of your study abroad experience? If you did, please elaborate on the nature of the discussion, as well as any outcomes.
7. Earlier this year, at the World Economic Forum in Davos, Switzerland, environmental activist Greta Thunberg expressed how she thinks “it is insane that people are gathered here to talk about the climate and they arrive here in private jet.” How would you respond to this in the context of your own IHP program?
8. As an alum, did your IHP program experience have an impact on the career path you pursued/are pursuing?
9. Are you willing to be contacted for a follow-up conversation about your study abroad experience? If so, please note your email here. If not, no worries, and thank you so much for your time!
Appendix E: Global air passenger traffic graph

*Note that while this graph ends in 2014, 4.4 billion trips were taken in 2018.

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Figure 1: Global air passenger traffic trend, 1950-2014
(IATA Forecast for 2014)

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Appendix F: Keeling Curve graph

Appendix G: Vultee advertisement

The man we look up to!

This we do know: in the world's every hour of crisis there rises a particular man or group of men who are placed there by destiny to defy, to fight and ultimately to defeat a common foe. It is so with us today.

We are challenged nowhere so strongly as in the air. And rising to give the answer are thousands upon thousands of our young men—Knights of the Round Table, their Grail the freedom of mankind, their steeds of steel, winged in deadly tournament amid the meteoric dust.

No one has ever lived who knew the equal of their courage. And no people have ever had a stouter barricade against a foe. As our aviators fling themselves into that ultimate and decisive battleground—the sky, soaring with them are the hopes of the Democracies of the world.

They are not only fighting; they are “going to school” in a new realm where the scale of man's thinking is large. They see at first hand how small is the world, how easy to fly around it, how petty and futile its fences and boundaries, how inadequate its old yardsticks of distance, and how pinched is yesterday's concept of geography.

Their heroic task accomplished, these airmen will be returning to a new world of their own making, to the world we shall live in tomorrow—the world of the air, as well as of land and water. The Vultee trained, in which they were crafted and the fighters and bombers in which they utilized their skill will see planes of Peace. And the universal air will vibrate with their promise of things better far than we have known.

VULTEE

VULTEE AIRCRAFT, INC. • WHITEFIELD, CALIFORNIA

Builder of Training, Dive Bombers and Fighters

Vultee Aircraft Aviation Council, Inc.

Appendix H: 1970’s Southwest Airlines flight attendant

Appendix I: United Airlines announcing a change in uniform\textsuperscript{338}

“First, we went out and commissioned Jean Louis, one of Hollywood’s best and most famous fashion designers”

Appendix J: Ford Motors advertisement

When eagles come to earth!
The men who fly the flagships choose Ford Motor Company cars

A recent survey among 200 American Airlines captains and first officers showed that 96 per cent of Ford, Mercury, or Lincoln-Zephyr cars. These men daily depend on the perfect performance of powerful engines. When they come to earth, they feel the same sort of performance in the smooth, precise V-type engines that power their cars.

Other mechanically minded executives of the company who own Ford or Lincoln-built cars are the president, vice-president in charge of operations, operations manager, and chief pilot. This is impressive testimony to the excellence of Ford engineering. These modern cars give you some of the basest pleasure of piloting a swift ship through the sky.

Appendix K: Herbert Tareyton cigarette advertisement

Appendix L: The Beatles at London Heathrow Airport\textsuperscript{341}

The Beatles returning from Sweden in 1964: (note all of the fans on the balconies in the background!)

Appendix M: Michael Kors For Men cologne advertisement

Appendix N: Louis Vuitton exhibition promotional material

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Appendix O: Climate Impact survey question

This graph shows the combined data from the SFS and SIT IHP student surveys. 227 students answered this question- 190 SFS students and 37 SIT IHP students.

Did you consider the potential climate impact of your travel when you were choosing your program?

- Yes: 85 (37.4%)
- No: 142 (62.6%)
Appendix P: Discussing climate impact survey question

This graph shows the combined data from the SFS and SIT IHP student surveys. 225 students answered this question- 190 SFS students and 35 SIT IHP students.

Did you think about or discuss your climate impact over the course of your study abroad experience?

- No: 56 students (24.9%)
- Yes: 169 students (75.1%)
Appendix Q: Meaningful educational experience survey question

This graph shows the data from the SIT IHP student surveys. All 37 survey participants answered this question.

What were your most meaningful educational experiences of the semester?

- Engaging with locals: 18
- Site visits: 14
- Homestays: 9
- Individual research projects: 5
- Guest Lectures: 3
- A specific class lesson: 3
- Group friendships: 2
- Case studies: 2
- Community building activities: 1
Appendix R: Top 3 reasons survey question

This graph shows the data from the SIT IHP student surveys. All 37 survey participants answered this question. It is important to note that there were some students who only wrote about their top one or two reasons for choosing their program, and there were others who mentioned more than the three requested reasons. I tallied up all responses, no matter how many reasons the student gave because I didn’t feel I was in the position to choose which responses to consider or ignore when students gave more than three reasons for choosing their program.

What were the top 3 reasons you chose that particular program? What made you choose this program over others?

- 29: Academic topic
- 25: Format of the program
- 15: Comparative nature
- 12: Sociological approach
- 7: Language practice
- 4: Opportunity for adventure
- 3: Lack of language requirement
- 3: Recommended by advisor
- 2: Credits applied towards major
- 2: Family connection
- 1: Homestay component
- 1: Other
Appendix S: Career path survey question

This graph shows data from the SIT IHP student surveys. 36 students answered this question- 28 indicated that their IHP program impacted their career path, 7 indicated that their IHP program did not impact their career path, and 1 student was unsure if their experience abroad would impact their career path.
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