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INTERCULTURAL COMMUNICATION IN THE GLOBAL AGE: LESSONS LEARNED
FROM FRENCH TECHNICAL COMMUNICATORS

by

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A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Arts
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in the College of Arts and Humanities
at the University of Central Florida
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ABSTRACT

This thesis explores the cultural considerations American technical communicators must address when working with French colleagues and when creating technical documentation for French audiences. A review of the literature on intercultural communication theory was conducted, along with a review of the limited research on technical communication in France and the needs of French audiences. A qualitative online survey of French technical communicators was also conducted. Through this survey, French technical communicators reported on their intercultural beliefs, experiences, and practices, and information, language, and cultural needs.

Survey responses were analyzed using inductive thematic analysis. Two main themes were developed as a result of this analysis: the importance of adapting content to French audiences, and the cultural differences between French and American information needs and communication styles. Survey findings are combined with theoretical and practical literature to offer American technical communicators guidance for successful intercultural interactions. This thesis concludes with suggestions for future practice and research in intercultural technical communication.

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CHAPTER ONE: INTRODUCTION

Preface

My first truly immersive experience with French culture took place during the summer of 1997. I was an undergraduate student in my junior year of studies in public relations, French, and business at a small university in West Michigan. My career interest at the time was international public relations and I was encouraged to study abroad so that I could fully immerse myself in the experience of living in a culture very different from my own. Given my interest in French language and culture, I decided to join a group of twelve American classmates who were participating in a summer trip to an institution that has since been rebranded Paul Cézanne University in Aix-en-Provence, France. My classmates and I were accompanied by a professor from our home university. Professor Gauthier (pseudonym) was a native French woman and had been living in the United States for many years.

On arrival in Aix-en-Provence, all foreign students at the French university were given a placement exam to determine the level of French language and culture classes we would be taking. The exam was essentially a test of our reading and writing skills, and did not take verbal ability (my weakness at the time) into account. I placed in the highest level of classes available to foreign students at the university. This experience proved daunting because I was not placed with any of my American classmates, and was essentially thrust into a program with students who had been studying French much longer than I had. Most of the students in my class were from other European countries, notably England, Italy, Germany, the Netherlands, and Iceland. There were also one or two students from Asia. I was the only American in the class, and the professor made it her personal mission to ridicule and humiliate me.

I knew I was in trouble from the first day of class, when Professor Dubois (pseudonym)

performed the initial roll call. Coming across my surname, she asked where I was from. When I told her that I was from the United States, her face contorted with a look that I can only describe as either contempt or disgust. She sneered, and simply said, “Ah, an American.” I remember blushing and saying nothing in response to what sounded like judgment and stereotyping. Throughout the duration of our class, Professor Dubois told me my accent was so terrible that it hurt her ears when I spoke French, pointed me out as an example of how not to speak her language, openly mocked the way I spoke in front of the rest of the class, and returned my papers and essays with a veritable sea of red ink. Professor Dubois also made a habit of returning homework by announcing each student’s grade to the entire class, a practice that was very disconcerting and incomprehensible to me. This was especially painful because I usually received one of the lowest marks in the class, despite the excellent quality of my written work, as verified by Professor Gauthier.

One day, Professor Dubois decided to make a mockery of an essay that I had written on a particular American economic theory. She praised the essays written by everyone else in the class. Then, with my essay in her hand, she turned to the rest of my classmates and said, “There is one essay of special note.” She turned to stare at me for what seemed like an eternity before announcing to the class that the essay written by “Mademoiselle Tallman” was “simply barbaric,” behavior that she proclaimed was quite typical of people from my culture. She proceeded to demand that I re-write the essay or she would be forced to give me a failing grade for the assignment. She handed me back my essay and I sat there in astonishment. I honestly cannot remember what happened after that point in class that day because I tuned out. In fact, Professor Dubois was so brutal in the delivery of her remarks that one of the students from the

Netherlands came up to me after class and expressed her sympathy.

I was so upset by the verbal lashing I received that I decided to return straight home when I was dismissed, rather than going to my culture class with Professor Gauthier. As I exited the university's main entrance, I was intercepted by Professor Gauthier, who asked if something was wrong. When I recounted what had just happened, she simply told me not to take it personally. She offered to speak to Professor Dubois on my behalf, but advised against it. "She will only humiliate you more if she thinks you have tattled on her," Professor Gauthier said. I heeded Professor Gauthier's advice and resolved to toughen up for the remainder of the term.

What happened on the final day of class, however, came as another culture shock. For her final teaching session, Professor Dubois invited the entire class to have drinks with her at a little *resto* on the Cours Mirabeau. I debated whether or not to go because the professor and I had such a strained relationship, and I was tired of subjecting myself to her insults. I decided to attend, if only to save face and to have the chance to formally say goodbye to the classmates who had become my friends during this trying time. It was at this farewell gathering that I saw a completely different side of Professor Dubois.

When I approached the table where Professor Dubois was seated, I noticed a look of openness on her face, and she invited me to sit next to her. I complied and found that she was surprisingly kinder to me than she had been in class. She had softened a bit, seemed more relaxed, made jokes, did not mock my accent once, and went to great lengths to tell me how much she enjoyed having me in her class. I was astonished and even more confused than when I had first arrived in Aix-en-Provence. So many questions flashed through my mind: Why did she torment me all semester, and then become pleasant once she knew I would no longer be her

student? Was she completely immune to the impact she had had on my self-esteem? Did she not realize that she had made me embarrassed to speak the language I had wanted to master? Did she not know that when an American student pays for a class, that student expects to be treated with respect and to enjoy the learning experience?

I learned a lot about French teaching style and French culture, in general, from this experience. University professors in France take an entirely different approach to pedagogy than professors in the United States. This approach has been documented by scholars such as K. David Roach, Myrna M. Cornett-Devito, and Raffaele Devito, who indicated, among many variances, a deeply engrained cultural expectation by French students for instructors to exercise power. According to Roach et al.'s research, French students' learning generally increases with professors' use of coercive power (negative reinforcement), while American students' learning increases with positive reinforcement from professors.

Despite all of the negative reinforcement I endured from Professor Dubois, I was determined to earn my bachelor's degree in French. I accomplished this goal in 1998. Soon after, I landed a job that put me in frequent contact with French colleagues. I can only speculate that my accent has improved since my time in Aix-en-Provence because my French colleagues were always pleasantly surprised by my command of the French language, and never winced when I conversed with them in their language. Six years ago, I left my corporate career to take a job in higher education that, unfortunately, permits me very infrequent contact with French colleagues. I have, however, retained my love of the French language and culture, and make a concerted effort to continue my studies by reading French literature and newspapers, listening to French radio, watching French movies, and interacting as much as possible with French people through

forums such as the Society for Technical Communication France LinkedIn group. This brings me to where I am today, and to the true root of my research interests and aspirations. After all of my intercultural experiences with the French—the good and the bad— I still have not figured it all out. And my thesis represents one more step in my ongoing quest to better understand French people and their culture.

Introduction to Study: A Brief History of Intercultural Technical Communication

As a profession, technical communication has been historically conducted within regional or national borders. Technical communication practitioners in countries such as the United States (U.S.) tended to develop products primarily for regional or national markets (St. Amant, “Thinking Globally” 1). These practitioners were part of project teams comprising colleagues who lived and worked in the same region as they did. These practitioners also shared a common culture and language with the audiences of their documentation. This model of common culture and language continued for nearly half a century. Then, at the end of the 1990s, new forces began globalizing the practice of technical communication (St. Amant, “Thinking Globally” 1). The Internet, World Wide Web, and other forms of online media, facilitated communication among people from all over the globe. In response to these technological advances, workplaces began to operate in virtual spheres, with globally dispersed employees collaborating on projects in real time (St. Amant, “Thinking Globally” 1-2). At the same time, the documentation produced by virtual teams began to change in response to globalization. Trade barriers and tariffs diminished, widening access to previously impenetrable markets for technical products (St. Amant, “Thinking Globally” 2). Practices such as technical translation, localization, and

internationalization of technical documentation became important strategies for attracting and retaining global customers, especially customers of information and technology products (St. Amant, “Thinking Globally” 2). Economic forces and online media have forever altered the practice of technical communication, and today’s American technical communication practitioners are often developing information products for, and working as part of a team composed of, people from an increasingly wide range of cultural and linguistic backgrounds (St. Amant, “Thinking Globally” 2). The desire to compete globally has also resulted in the proliferation of the technical communication profession in other countries, such as France.

In France, the technical communication profession materialized sometime between the mid-eighties and early nineties—nearly fifty years after the profession emerged in the U.S. (Minacori and Veisblat 757). While technical communication in France has traditionally focused on translation, French companies have recently identified an economic need for native (local) technical communicators with intercultural communication skills (Dressen-Hammouda 174). As more French technical communicators enter the global marketplace, the level of interaction between French and American technical communicators is sure to increase substantially. Americans will need to consider numerous intercultural factors to facilitate successful collaboration with their French counterparts (Dressen-Hammouda 172).

Rationale for Research

Technical communication is a relatively new profession in France and, therefore, research in the field is only just beginning to emerge (Minacori and Veisblat 761). The January 2013 publication of Franck Ganier’s *Comprendre la Documentation Technique (Understanding*

Technical Documentation) represented a historical and pivotal moment for technical communication in France, offering the first French-authored guide to the study of the profession (Flacke, “Comprendre”). Compounding the novelty of the field is the lack of positions for professors of technical communication, and subsequent lack of a platform for academic research in the field (Minacori and Veisblat 761). As American technical communicators are increasingly required to engage readers from different cultural backgrounds, knowledge of specific cultures is needed to develop effective content (Wang and Wang 39). However, an examination of peer-reviewed technical communication research reveals little detailed information on the needs of French audiences, whether as colleagues to American technical communicators, or as readers of technical documentation. France has the third largest economy in Europe and the sixth largest economy in the world; it is the globe’s top tourist destination and fifth largest exporter (Hamilton and Quinlan 1). Despite France’s position as one of the largest and most competitive economies in the world, little research on intercultural technical communication has been devoted to this global powerhouse. Research is also needed to further explore and address the historical differences and tensions that have often surfaced between the French and American cultures.

The Storied Relationship between France and the U.S.

France has often been categorized as the United States’ oldest ally, but recent events in history, such as France’s disapproval of the Iraq War, have created a chasm between these two nations (Miller and Molesky 2-3). As Roach et al. note, “Though the USA has French influence woven into the fabric of its history and culture, modern American culture is different from that of France” (88). These differences fall into several categories, including world views, philosophies,

and the role of government and education (Roach et al. 88). Further researching the differences that exist between French and American culture can help promote mutual understanding. My thesis will contribute to the body of research on intercultural technical communication by surveying a group of French technical communicators. This survey will provide a much-needed examination of the specific information needs of French audiences, and current beliefs, experiences, and practices of French technical communicators, as expressed in their own voices. The popularity of books like Polly Platt's *French or Foe*, Jean-Benoit Nadeau and Julie Barlow's *Sixty Million Frenchmen Can't Be Wrong: Why We Love France but Not the French*, and Raymonde Carroll's *Cultural Misunderstandings: The French-American Experience*, further fuel Americans' general love-hate relationship with the French. The time has come to move beyond the tension, and find ways to facilitate successful intercultural encounters.

Questions This Thesis Will Answer (Scope)

This thesis will answer the following questions about intercultural technical communication:

- What techniques can American technical communicators use to bridge the potential linguistic and cultural gaps between themselves and their French counterparts?
- What advice or best practices do French technical communicators have for Americans working on intercultural technical communication projects?
- How can American technical communicators create content that speaks directly to French user needs?

- How important is it to provide localized technical documentation to French audiences?
Are there instances when globalized approaches suffice?
- How can this research benefit other areas of intercultural technical communication?

Organization

The remainder of this thesis is organized in the following manner:

Chapter Two presents an overview of the recent theoretical and practical research on intercultural technical communication, provides an examination of the limited literature on the informational and cultural needs of French audiences and on the profession of technical communication in France, and identifies areas for future research. Chapter Three describes the methods that I have used to address the need to learn more about the specific information requirements of French audiences, and the beliefs, experiences, and practices of French technical communicators. Chapter Four presents, analyzes, and discusses the data I collected by conducting a qualitative online survey of technical communication practitioners in France. The study concludes with Chapter Five, which provides suggestions for future practice and research in intercultural technical communication.

CHAPTER TWO: LITERATURE REVIEW IN PROFESSIONAL INTERCULTURAL TECHNICAL COMMUNICATION

One of the primary motivations for conducting qualitative research is that the study itself is “exploratory,” meaning that little scholarly literature has been written on the topic in question or about the group that the researcher is interested in examining in greater detail (Creswell 26). In *Technical Communication in the Global Context: A Heuristic Approach to Disciplinary Identity and Pedagogical Practices*, Laurence José traces the beginning of scholarship about technical communication in global contexts to the late 1980s, but notes that it remains in the “developmental phase” (42). For this literature review, I focused mainly on peer-reviewed journals, scholarly books, lectures, and dissertations from 2000-12 for research specifically related to intercultural technical communication in non-academic settings. Some of the seminal intercultural communication works from the 1970s, 1980s, and 1990s are included as a way to ground the findings of intercultural communication scholars who conducted research in the new millennium. This literature review presents an overview of the recent theoretical and practical research on professional intercultural technical communication, provides an examination of the limited literature on the informational and cultural needs of French audiences and on the profession of technical communication in France, and identifies areas for future research. In this literature review, culture is defined as “a program for behavior” and is based on the idea that members of a common culture not only share information, but also methods of coding, storing, and retrieving that information (Hall and Hall xiv). Better understanding the kind of information that people from France require is one key to promoting greater intercultural understanding

between French and American technical communicators and their audiences (Hall and Hall xiv).

Intercultural Technical Communication Scholarship

Each country simply has its own way of seeing and doing things, based on unstated rules, and these hidden differences often make cooperation difficult (Hall and Hall xiii).

The work of anthropologist Edward T. Hall and cultural sociologist Geert Hofstede is referenced in most intercultural technical communication studies. Hall offers technical communicators a way to explore cultural similarities and differences in communication by examining cultures based on indicators of high and low context. “Context” is defined as the “information that surrounds an event” and “contexting” is defined as the “process of filling in background data” (Hall and Hall 6-7). High-context messages are placed at one end of the communications continuum and low-context messages are placed at the other end. A high-context communication or message is one in which much of the information is contained in the context (background information) and nonverbal cues, rather than expressed explicitly in words. A low-context communication is the mirror opposite, with much of the information contained in the specific message and words used (Hall, *Beyond Culture* 91). Hall notes that although no culture exists exclusively at one end of the scale, some cultures are predominately high on the scale while others are low on the scale (*Beyond Culture* 91). The author also argues that the level of context determines everything about the nature of the communication and is the basis on which all subsequent behavior is determined (*Beyond Culture* 92). Hall states that an important part of communication strategy is deciding how much time to invest in contexting (filling in the background information for) the other person. Failing to take what people already know into

account can cause misunderstanding and frustration. Differences between the contexting needs of low-context and high-context cultures can be seen in examining American and French culture¹.

While detailed country rankings for Hall's contexting theory do not exist, Hall generally classifies the United States (U.S.) as a low-context culture and France as a high-context culture, and provides different approaches to communicating with people in each country based on these contextual differences. According to Hall, high-context people, like the French, do not require as much explicit information in any communication encounter because much of the meaning resides in a shared cultural context. Hall argues that high-context people are likely to grow "impatient and irritated" when low-context people provide more information than is needed (Hall and Hall 9). Applying the principles of low and high context to the practice of technical communication tells us that American technical communicators who work with French technical communicators should be sensitive to the differences that exist between low-context American culture and high-context French culture, and that American technical communicators will need to develop technical documentation for French audiences according to the information needs of a high-context culture. According to Hall and Hall, "The French are much higher on the context scale than the Americans. This difference can affect virtually every situation and every relationship in which these two opposite traditions find themselves" (7).

Figure 1 shows Hall's Context Square, which uses two right triangles and a rectangle to show the relationship among context, information, and meaning. This Context Square is superimposed with David Victor's diagram of the context rankings of ten different cultures, including France and North America, on a continuum (Hoft 80). According to Hall, "as context

¹American culture throughout this thesis refers specifically to the culture of people born in the United States, while French culture refers specifically to the culture of people born in France.

is lost, information must be added if meaning is to be constant...there can be no meaning without both information and context” (*The Dance of Life* 61). The French, who represent a higher-context culture than Americans do, share more stored information and, therefore, require less explicitly stated information in order to understand the meaning of a communication.

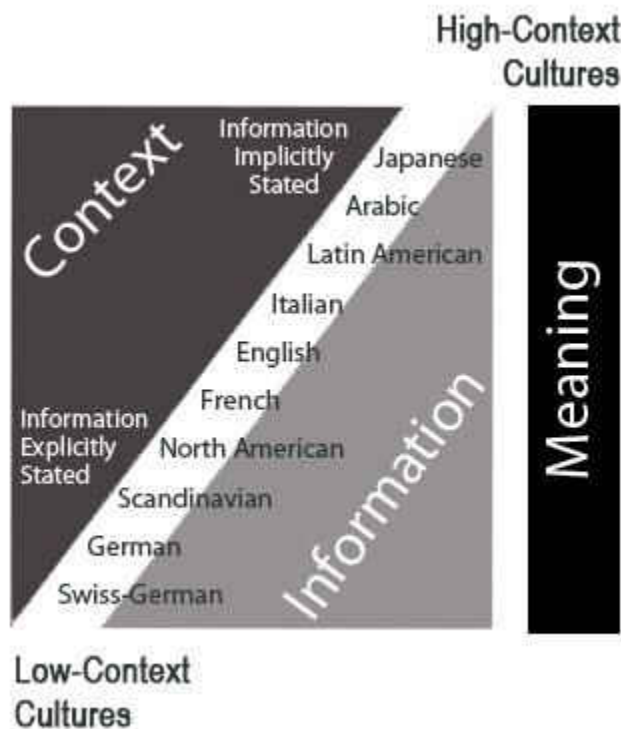


Figure 1: Hall’s Context Square and Victor’s diagram of the context ranking of cultures (author’s interpretation). Reprinted with permission from Nancy Hoft.

Hall and Hall note that one of the greatest communication challenges in life is to “find the appropriate level of contexting needed in each situation” (9). The authors argue that too much information leads people to feel as though they are being condescended to, while too little information can confuse them or make them feel left out (9). Keiran J. Dunne uses instructions

for cooking pizza as a way to demonstrate how low- and high-context cultures differ in the need for the explicitness of a message. He notes that packaging instructions in low-context cultures, like the U.S., direct the consumer to cook the frozen pizza before consumption. This level of detail is not included on packaging for pizza in high-context cultures, like France, because the message would seem like an insult to intellect or superfluous. It is simply understood in France that frozen food should be heated before it is consumed (Dunne 176-77).

While Hall's model of examining culture in terms of low- and high-context is prominent in intercultural technical communication scholarship, equally important is the work of Geert Hofstede. Hofstede originally explored the differences in thinking and social interaction that exist among members of more than forty nations, including the U.S. and France. Hofstede's research shows how cultural differences may be characterized using cultural dimensions, or aspects of cultures that can be measured relative to other cultures. Hofstede treats culture as "the collective programming of the mind which distinguishes the members of one human group from the other" (21). In his very first book, *Culture's Consequences: International Differences in Work-Related Values*, the author identified four main dimensions of human value systems: Power Distance, Uncertainty Avoidance, Individualism versus Collectivism, and Masculinity versus Femininity. Power Distance is the measure of a culture's tolerance for inequality among its members (72). Uncertainty Avoidance is the level to which a culture feels threatened by ambiguity and the unknown (118). Individualism is the degree to which a culture defines itself as independent (149). Masculinity is the extent to which a culture is motivated by success and

competition (190). Hofstede posited that a country's overall scores in these dimensions offer telling signs of the organizational dynamics within a culture².

While all of Hofstede's dimensions have an impact on intercultural communication, cross-cultural research empirically demonstrates that Individualism versus Collectivism is the most important dimension for isolating differences among cultures (Hall, de Jong, and Steehouder 491). Therefore, Individualism versus Collectivism is the dimension that I will focus on in this thesis. To provide a fuller definition, the Individualism versus Collectivism dimension refers to the relationship between the individual and the collective that exists in a society, and is reflected by the ways people live together.

In his latest book, *Cultures and Organizations: Software of the Mind: Intercultural Cooperation and Its Importance for Survival*, Hofstede describes the common characteristics of an Individualist culture. Hofstede argues that the ties between people in Individualist cultures are loose and that "everyone is expected to look after him- or herself and his or her immediate family only" (Hofstede, Hofstede, and Minkov 92). Conversely, Hofstede argues that in a Collectivist culture, "people from birth onwards are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty" (92). Hofstede explains that the main difference between Individualist and Collectivist cultures is evidenced by identity, and whether this identity is more closely linked with the pronoun "I" or with the pronoun "we." In a highly Individualist culture, an "I" consciousness is standard; emphasis is placed on self-orientation, identity is based on the individual, and

² Since 1980, Hofstede has added two additional cultural dimensions, Long- and Short-Term Orientation and Indulgence versus Restraint. These dimensions are covered in *Cultures and Organizations: Software of the Mind: Intercultural Cooperation and Its Importance for Survival*. In this work, he also expands the scope of his research to include more than seventy nations.

individual initiative and achievement is valued (*Culture's Consequences* 171). In a Collectivist culture, “we” consciousness is the standard, emphasis is placed on group orientation, and identity is based on belonging and membership (*Culture's Consequences* 172).

While France is not labeled a “Collectivist” culture by Hofstede’s classification, this country ranks much lower in Individualism than the U.S. In Hofstede’s original analysis, France and Sweden ranked tenth in this dimension among all countries surveyed, while the U.S. ranked first (*Culture's Consequences* 157). Tying Hofstede’s research to that of Hall, Hall distinguishes the type of Individualism that exists in the U.S. versus France as follows: Americans are “fiercely individualistic,” want to be “their own persons,” and operate with an attitude of “every man for himself” and “freedom in all things” (Hall and Hall 147); on the contrary, the French tend to view individuality as operating as a “nonconformist,” not always being responsive to others’ needs, and resisting pressure for public conformity (Hall and Hall 106). Hofstede draws a connection between his work and that of Hall, arguing that high-context communications are frequent in Collectivist cultures, and that “lots of things that in collectivistic cultures are self-evident must be said explicitly in individualist cultures” (Hofstede, Hofstede, and Minkov 109).

In this thesis, I will argue that the differences and similarities between French and American culture can be best studied by applying a combination of Hall’s contexting theory, Hofstede’s Individualism versus Collectivism dimension, and a set of other international variables advocated by scholars such as Nancy L. Hoft and R. Peter Hunsinger. These three lenses offer American technical communicators valuable insights into how to bridge cultural gaps between themselves and their French counterparts. Technical communication scholars, however, have differing views toward theoretical models for conducting intercultural technical

communication, especially regarding the work of Hall and Hofstede. In the next two sections of this literature review, I will present both sides of the scholarly debate, and provide an explanation for why I agree with the proponents of Hall and Hofstede's theories.

Proponents of Hall and Hofstede's Theories

Many technical communication scholars see the value of the intercultural communication theories devised by Hall and Hofstede, and argue that these theories can serve as useful models for understanding cultural differences and similarities that technical communicators may encounter in their work. Some of the strongest supporters of Hall and Hofstede's research are Barry Thatcher, Yiqin Wang and Dan Wang, and Nancy L. Hoft. In "Web Site Analysis across Cultures: An Inquiry into InterCultural Values and Web Site Design," Thatcher et al. argue against the commonly held belief that the countries and cultures of the world are becoming much more homogenized due to such influences as global economics, immigration, and the World Wide Web (125). Thatcher et. al use the results from their study of nine distinct cultures to underscore what they believe to be the necessity to localize websites that are targeted for other cultures, and further recommend that technical communicators "draw on the already attributed cultural values from Hofstede" (141). Wang and Wang, in "Cultural Contexts in Technical Communication: A Study of Chinese and German Automobile Literature," similarly value the insights of Hall and Hofstede, arguing that their findings demonstrate that:

There are cultural differences in terms of high and low contexts, in

language, and in thought patterns. These cultural dimensions influence the presentation of technical information in terms of structure, content organization, amount of information provided, terminology, and the relationship between text and graphics, as well as the users' perceptions of technical information (48).

Nancy L. Hoft, in *International Technical Communication: How to Export Information about High Technology*³, encourages technical communicators to choose a “model of culture” and use that model as a way to study the cultural context of a particular national group (77). At the top of the list of models that Hoft recommends to technical communicators, are those of Hall and Hofstede. Hoft shows technical communicators how Hall's contexting theory and other theories related to cultural differences in concepts of space (proxemics) and time (monochronic versus polychronic), information flow and action chains, can be used to understand cultural differences among user groups. Hoft also discusses Hofstede's Individualism versus Collectivism dimension and how identifying differences in “mental programming” according to this dimension can help technical communicators better understand the culture of various target audiences (79-80). Hoft argues that technical communicators can further strengthen the efficiency and effectiveness of their intercultural communications by performing a thorough international-user analysis. This analysis includes studying whether the users of a particular national culture are low or high context, and Individualist or Collectivist, along with comparing the target culture with one's own culture according to differences and similarities in seven key realms: political, economic, social, religious, educational, linguistic, and technological (62-63).

³ While Hoft's book was written in the 1990s, it is one of the most frequently cited texts in intercultural technical communication scholarship and remains relevant to the practice of the profession today.

Like Thatcher, Wang and Wang, and Hoft, many other scholars support Hall and Hofstede's national-culture value implications. In *Cross-Cultural Differences in Preferences for Visual Information in Technical Documentation*, Patty-Jo Bellamy applies Hofstede's Individualism versus Collectivism dimension to study cultural preferences for the organization of visual information within technical documentation. Bellamy argues that Individualist cultures typically prefer separating out the visuals in user manuals, only showing the parts of the product to be addressed in operating, assembling, or maintaining the product; while Collectivist cultures prefer seeing how all of the differing parts of the product combine into the whole picture, before operating, assembling, or maintaining the product (11). Similarly, Peter J. Hager maintains the importance of selecting graphics that match culturo-linguistic visual conventions, reading habits, and expectations. In "Global Graphics: Effectively Managing Visual Rhetoric for International Audiences," Hager explores the rhetoric of international graphics and identifies the regular failures of projects attempting to incorporate global "one-size-fits-all" graphics. Linda Lash Brownson further supports Hofstede's research in *The Cultural Obstacles to Globalization: The Franco-American Case*. In this work, Brownson investigates the reasons behind the elevated failure rates of mergers and acquisitions between American and French corporations, hypothesizing that national-culture value differences in attitudes, values, and communication styles are to blame. Also supporting the work of Hall and Hofstede, is Quiye Wang, who, in "A Cross-Cultural Comparison of the Use of Graphics in Scientific and Technical Communication," cites Hall's national-culture value implications and provides a thoughtful exploration of the cultural factors that may explain American preferences for specific information in technical communication. The next section of this literature review will examine the arguments of

technical communication scholars who oppose Hall and Hofstede's national-culture value implications.

Challenging Hall and Hofstede

Despite the prevalence of Hall and Hofstede's national-culture value implications, an examination of recent technical communication literature shows that more researchers are challenging Hall and Hofstede's previously espoused theories of intercultural communication. Kirk St. Amant cautions technical communicators who use national-culture values research to bear in mind that this information can only be applied to general patterns of cultural behavior. In "Online Ethos and Intercultural Technical Communication: How to Create Credible Messages for International Online Audiences," St. Amant argues that it is only through "modifications based on exposure and experience that truly effective cross-cultural communication can take place" (134). Wei-Na Lee and Sejung Marina Choi parallel St. Amant's emphasis on the importance of the individual over national-culture value orientations. In "Classifying Web Users: A Cultural-Value Based Approach," the authors argue that living in a global society exposes people to many different cultures besides their own and potentially makes national-culture research obsolete. Lee and Choi argue that "Global trends, growing communication between cultures, and shifting frames of culture reference make the scrutiny of individual cultural orientations a pressing issue" (59). Like St. Amant, and Lee and Choi, R. Peter Hunsinger also faults intercultural communication models focusing solely on what are seen in our global, digital age as potentially limited and outdated cultural dimensions and typologies. In "Culture and Cultural Identity in Intercultural Technical Communication," Hunsinger argues that "both Hall's and Hofstede's definitions imply a theory of culture and cultural identity in which these two

things are effectively stable ... an essentializing practice that displaces cultural identity from the concrete individual into a typical instance of the individuals who share a culture” (33-34).

Hunsinger proposes looking at alternative anthropological and sociological theories to develop more effective ways of studying and discussing culture in technical communication. He specifically advocates the insights of Arjun Appadurai, who believed that the key to understanding cross-cultural communication was rooted in the connection between cultural identity and the fluid demographic, economic, historical, political, and technological facets of a globalized society. Hunsinger, above all, urges continued critical examination of cultural issues so that people working in technical communication contexts may interact effectively and flexibly in increasingly global contexts.

While St. Amant, Lee and Choi, and Hunsinger argue for more individualized or updated and expanded approaches to intercultural communication in the global age, Peter W. Cardon takes issue with Hall’s contexting theory based on what he believes to be a lack of empirical evidence. In “A Critique of Hall’s Contexting Model: A Meta-Analysis of Literature on Intercultural Business and Technical Communication,” Cardon calls Hall’s contexting theory “popular and appealing yet unsubstantiated and undeveloped” (399). He notes, that while Hofstede’s research has been published in peer-reviewed journals and empirically validated, Hall’s work has escaped critical examination, while being elevated to the status of one of the “most dominant theoretical frameworks for interpreting intercultural communication” (Cardon 399-400).

The scholars mentioned above, who criticize Hall and Hofstede’s national-culture value implications, mostly do so because they believe Hall and Hofstede’s research is outdated or fails

to take individual identity into account (see St. Amant, Lee and Choi, and Hunsinger), or because of a perceived lack of empirical validation (see Cardon's critique of Hall). As Jennifer Bracken Scott contends, "Scholars who argue against their [Hall and Hofstede's] methods see these frameworks as dictating the values of every member of a culture, whereas the real intention of describing cultural values is to describe regularities or tendencies" (81). By consulting the work of Hall and Hofstede, we can see the inherent flaw with discrediting their theories based on the failure to consider the cultural needs of the individual. As Hall and Hall note, "Of course there are individual differences—including ethnic differences—within every country. This is particularly true of...the United States...and France, whose many regions have various mini cultures of their own" (xx). They continue, "Within each culture, there are specific individual differences in the need for contexting...but it is helpful to know where the culture of a particular country falls on the high or low side of the scale since every person is influenced by the level of context" (7). Hofstede, in a recent lecture, addresses the question of cultural differences between individuals head-on. Categorizing this question as a "paradox," Hofstede argues, "Culture is, by definition, something collective. Individuals have personalities...but cultures are precisely what one individual shares with another individual of the same background" ("Recent Discoveries about Cultural Differences"). Elizabeth Würtz, in "Intercultural Communication on Web Sites: A Cross-Cultural Analysis of Web Sites from High-Context Cultures and Low-Context Cultures," addresses critics who oppose national-culture value orientations based on the assumption that the digital age has blurred cultural boundaries, and those who dismiss the contributions of Hall and Hofstede because of a perceived lack of empirical evidence. Würtz argues, "There has been no convincing demonstration that relative differences with regard to prevailing norms in cultures do

not exist in practice, and on the basis of this that Hall and Hofstede's parameters should be discarded completely" (276). Würtz acknowledges the importance of criticisms, but definitively argues that "communication patterns today still resonate with the cultural dimensions proposed decades ago" (276).

It is interesting to note that scholars who criticize or reject existing models used for intercultural technical communication, like Hall and Hofstede's, or criticize current models used to understand culture, are quick to point out shortcomings, but slow to propose detailed alternatives that could be useful to the field, leaving technical communicators no solid path for further investigation. The dangers that scholars see in using Hall's contexting theory and Hofstede's Individualism versus Collectivism dimension can be averted if technical communicators treat these models as two tools for studying intercultural technical communication, and not as the end-all authoritative standard. Employing a flexible approach will help technical communicators avoid many of the problems inherent in the rigid application of these theories, specifically, the danger of forming cultural stereotypes and assumptions based on superficial analysis of cultures. Hall's contexting theory and Hofstede's Individualism versus Collectivism dimension should, thus, be categorized as tools that can aid technical communicators in further developing their intercultural competencies, whether in developing technical communication for a specific culture, or in collaborating with colleagues from another culture. As mentioned earlier, technical communicators can further strengthen the efficiency and effectiveness of their intercultural communications by performing a thorough international-user analysis that includes not only looking at culture in terms of high and low context, and Individualism versus Collectivism, but also by examining the political, economic, social,

religious, educational, linguistic, and technological differences and similarities between cultures. The next section of this literature review discusses the technical communication research related specifically to the needs of French audiences.

Technical Communication Research Related Specifically to French Audiences

The French culture is a mixture, a mélange, of high- and low-context institutions and situations. It is not always possible for the foreigner to predict in what proportions they will be found or in what order they will occur (Hall, Beyond Culture 107).

During the past several decades, the technical communication field has witnessed a significant increase in the amount of research conducted in international contexts. Most technical communication books published in the last ten years include sections covering intercultural communication (see Anderson, Houp et al., Johnson-Sheehan, Lannon and Gurak, and Markel) and the field's top scholarly journals have published numerous articles and special editions exploring topics in intercultural communication (see Ding and Savage, Scott and Longo, Starke-Meyerring, and Zemliansky and Kampf). A wealth of scholarly research has also been conducted regarding the influence of language and culture on the interpretation of information. However, many of those published works focus on the interaction between Asian and American cultures (see Quiye Wang, Wang and Wang, Barnum and Li, Ding, and Yu) with little study devoted to linguistic and cultural differences between American and French audiences, and how these potential differences could impact the work of technical communicators in global environments. In fact, English-speaking and Chinese cultures are by far the most frequently-studied cultures in technical communication literature (Cardon 414).

In the few studies that focus on French audiences, there are several limitations, especially when American technical communicators attempt to apply these research findings to their own intercultural communications with their French counterparts. For example, In “Mutual Intercultural Perception: How Does It Affect Technical Communication? Some Data from China, the Netherlands, Germany, France, and Italy,” Jan M. Ulijin and Kirk St. Amant offer insights into the cultural-communication factors that affect the way individuals from different international backgrounds perceive non-verbal cues in professional communication. The authors describe specific experimental results on cultural responses to questioning and pausing/interrupting behavior observed during videotaped business negotiations. Ulijin and St. Amant report that French observers were shown to perceive the most questions and time-use types in negotiations. In relation to the research subjects, the authors call attention to the congruity between French and Dutch patterns of perception, and Chinese and Italian patterns of perception. This work, however, does not offer information on American versus French patterns of perception. Also, because the French observers were the part of the “neutral” (neither Dutch nor Chinese) group in Ulijin and St. Amant’s experiment, little discussion is devoted to the results of the French participants. Another study by Ulijin, “Translating the Culture of Technical Documents: Some Experimental Evidence,” shows differences between French and Dutch audience preferences for the organizational structure of user manuals. The author claims that French audiences were better able to interpret technical instructions when those instructions were organized according to a culturally-determined pattern. In this case, that pattern involved presenting the rationale before the product or service (solution). This study, however, only compares the differences in the ways that French and Dutch audiences interpret technical

instructions, and does not compare differences between French and American audiences. There is also little discussion as to how Ulijin's findings more broadly apply to the development of technical documentation for French audiences.

While Ulijin and St. Amant look at French audiences in the context of business negotiations and preferences for the organization of information in user manuals, Stella Ting-Toomey considers whether French people are generally more likely to prefer direct or indirect forms of communication. In "Rhetorical Sensitivity Style in Three Cultures: France, Japan, and the United States," Ting-Toomey turns to Hall's contexting theory and Hofstede's Individualism versus Collectivism dimension to study possible communication differences among French, Japanese, and American cultures. The author argues that the communication characteristics of the French culture "remain an enigma" because French culture ranks moderate to high on Hofstede's Individualism scale, while Hall believes that the French culture can best be defined as "a mixed individualistic culture that is protected by both the individualistic and collectivistic values" (31). Ting-Toomey posits that French people can, therefore, be both "verbally explicit and direct" while remaining "nonverbally affiliative and contextual" (31). The specific meaning of this characterization is unclear, but Ting-Toomey concludes with the possibility that French people may prefer to express themselves "directly and precisely" in verbal communications, and "indirectly" and in a "roundabout" way in non-verbal communications (34). The study fails, however, to give specific recommendations to Americans who wish to use these research findings to facilitate communications with French people.

Based on the limited scope of information offered by scholars who have specifically studied French audiences in technical communication contexts, American technical

communicators seeking guidance on the technical communication and information needs of French audiences are met with few resources. The next section of this literature review discusses the research that is available on technical communication in France and the working relationships between French and American technical communicators.

Scholarship on Technical Communication in France

Today, technical communication is still a new field in France [and] training for French technical writers is largely translation-based (Dressen-Hammouda 174).

While very little English- or French-language literature has been written on technical communication in France, or on French technical communicators, two articles provide a framework for further studies on technical communication in France and justify the need for additional research in this area: Marie-Louise Flacke's "Technical Communication in France" and Dacia Dressen-Hammouda's "Teaching Technical Communication in France: Challenges and Prospects." The next section of this literature review will discuss these works in depth.

Flacke's "Technical Communication in France"

In 2005, Flacke published what is arguably the first scholarly article available in English on the subject of technical communication in France. At fourteen pages in length, Flacke's "Technical Communication in France" offers a cursory overview of the profession of "technical editor" (36). Flacke spends a considerable amount of time discussing the training courses and university-level programs available for technical editors. The author mentions French research conducted in the

fields of translation, terminology, and technical editing at Rennes II University and Paris VII University, and provides hyperlinks to the archived research. Because this research is only available in French, the studies Flacke references are unfortunately inaccessible to American technical communicators without significant French-language proficiency.

Flacke also gives the reader a brief overview of the two main French professional associations devoted to technical communicators, the Conseil des Rédacteurs Techniques and the French Chapter of the Society for Technical Communication. She also discusses how the bursting of the Internet bubble caused a significant dip in the demand for technical writers and editors in 2003. In discussing the salary range of technical editors, Flacke indicates that technical editors working in Paris and its immediate vicinity earn significantly more than their counterparts employed outside Paris. The author also points to a rather disturbing trend in the profession of technical communication in France: hiring technicians or engineers without editorial training to serve as technical editors. She does note that this trend is more common in the manufacturing and supply industry than among companies that specialize in providing technical documentation services. She also estimates that there are between 80,000 and 100,000 technical editors working in France, with only one to two percent of that number having specialized training in editing (48).

Flacke identifies the two greatest challenges facing French technical communicators as the dismal level of awareness about the existence of the profession of technical editing among potential employers and clients, and the popularity of outsourcing French technical documentation to countries such as China, Romania, Madagascar, and Mauritius (47-8). The most fascinating part of Flacke's article comes at the end, when the author makes predictions

about the future of the technical communication profession in France. Flacke predicts that “all translation and localisation [sic] work will be outsourced” and that these projects will be managed by “documentation departments in the company” (49). No further details are offered on this topic and what the specific ramifications of this move will mean to technical editors in France. Flacke, however, concludes by emphasizing the necessity for technical editors in France to increase their marketability by being more business minded and able to discuss the value their services can deliver in terms of “ROI, cost and profitability” (50). Flacke’s assessment of the profession of technical communication in France can be summarized as bleak at best. It is interesting to note that the author does not mention the issue of intercultural communication challenges that could arise from the increased outsourcing of French technical documentation, and that she encourages French technical communicators to focus on honing their PR skills rather than developing knowledge of other languages or cultures. Because this article was published eight years ago, it is important to research how much the profession has evolved since that time, whether technical communicators in France are now more recognized, whether French technical documentation has been outsourced as Flacke predicted, and what constitute the most pressing issues facing current practitioners. Dressen-Hammouda’s article, which will be reviewed next, provides additional perspective on these issues, and thus makes an equally important contribution to the literature on technical communication in France.

Dressen-Hammouda's "Teaching Technical Communication in France"

While Flacke's article on technical communication in France focuses mostly on the practical aspects of the profession, the focus of Dressen-Hammouda's article, written in 2011, is on the implementation of an intercultural technical communication master's degree program at the Université Blaise Pascal, Clermont 2, in central France. At seventeen pages, this article is longer than Flacke's examination of the practice of technical communication in France, and offers critical and updated insights into the state of the technical communication industry in France, the forecasted increasing interaction between French and American technical communicators, and intercultural communication tips for American technical communicators to facilitate successful interaction with their French colleagues.

What is immediately apparent in comparing Dressen-Hammouda's article to the earlier work of Flacke, is the optimistic tone employed by the former, heralding a positive change in the way that the technical communication profession is viewed in France. Dressen-Hammouda argues that the significance of hiring well-trained technical communicators is recognized by companies of all sizes throughout France and the European Union (167). It is important to note that Dressen-Hammouda specifically uses the title "technical communicator" to refer to the occupation that Flacke categorized throughout her article as "technical editor." This broadening of title reflects the recent need for more than editing skills in a technical communicator's professional repertoire.

Dressen-Hammouda attributes part of the reason for the elevated recognition of the importance of well-trained technical communicators in France to the results of a report

commissioned by the Directorate General for Education and Culture of the European Commission—which estimated that 945,000 European businesses had lost trade over a ten-year period due to their employees’ poor intercultural communication skills—and the subsequent push from government and industry to remedy this problem, for the economic wellbeing of the continent, by weaving intercultural communication training into the university curriculum (167). As Dressen-Hammouda turns the discussion back to her original topic of the new technical communication master’s program at the Université Blaise Pascal, the accuracy of Flacke’s insistence on the importance of business skills to the future of French technical communicators’ marketability becomes evident. Dressen-Hammouda reports that the new master’s program resides in the business/management/communication department, and is designed to train students to be experts in “company operations, knowledge management, IT tools, specialized foreign languages and international business” (169). She also touches on the recent trends in the French job market and how technical writers are increasingly expected to provide more than just translation services—they are expected to produce a wide array of technical documentation (171).

The final section of Dressen-Hammouda’s article is titled “Working with French Technical Communicators” (172). In this section, the author reports on the results of interviews she conducted with technical communicators working in France and Europe. The findings are limited by the fact that the author does not quantify or qualify her survey sample. The reader does not know how many technical communicators Dressen-Hammouda spoke with, if the technical communicators she interviewed are of French or European descent, or if they are technical communicators from other nations who are working in France and Europe. However

limited in scope, this section offers the most specific treatment on the topic available to American technical communicators who want to know more about how to work effectively with their French counterparts. The author offers a list of behaviors she labels as critical to successful interaction in France's intercultural business environment, which can be summarized as follows:

- Be willing to multitask.
- Develop awareness of localization needs. This awareness includes understanding the specific wants of French customers and knowing that their needs may differ from American customers' preferences; ensuring implementation of ISO standards; being knowledgeable about legal issues in France; and understanding problems that can arise with translation and the process of distributing versions of documents in multiple languages.
- Learn to speak basic French, and, when possible, conduct interviews and investigations in French.
- Respect cultural differences, especially in regard to differences in the concept of time and the extra amount of time it can take in France to perform a task that requires the feedback of multiple people.
- When editing the English written work of a French technical communicator, provide feedback in a respectful manner.
- Take cues from French colleagues to gauge the accepted behavior in specific social situations. Pay close attention to notions of personal space and the frequency and appropriateness of physical contact. Personal space in France is smaller than in the U.S. and people in France tend to leave less physical space between themselves than

Americans do. French people also have a tendency to touch each other more frequently than Americans do. A kiss on the cheek or hand shaking is not an uncommon greeting among colleagues in France each morning (172-3).

While Dressen-Hammouda does not characterize her tips as such, many are clearly aligned with the national culture-value implications advocated by Hall and Hofstede. For example, willingness to multitask correlates with Hall's assessment of the French as a polychronic culture. Members of a polychronic culture are high-context and are comfortable being involved in many activities at once (Hall and Hall 13-15). Americans, as members of a low-context and monochronic culture, are more comfortable doing one thing at a time and generally dislike interruptions (Hall and Hall 13-15). Dressen-Hammouda's advice that Americans be aware of localization needs, correlates with Hall and Hall's statement that knowledge of the technical rules and regulations that affect business in France should be a top priority for Americans conducting business there (111). Dressen-Hammouda's recommendation to Americans to learn to speak French corresponds with Hall and Hall's argument that "the most important skill for any foreigner who wishes to function effectively in France is to learn to speak the language well" (93). Respect for cultural differences, especially in regard to differences in the concept of time, ties directly to Hall's argument that "each culture has its own language of time" and that lead time in France can be greater than in the U.S. because "scheduling cannot frequently be initiated until meetings are held with concerned members of the organization to permit essential discussions" (Hall and Hall 18-19). Hall and Hall note that in monochronic cultures, like the U.S., keeping others waiting can be a deliberate insult, whereas in a polychronic culture, such as France, no such message is implied (22). The request for Americans to provide feedback to

French technical communicators in a respectful manner corresponds with Hall's argument that the French "deplore casualness and informality (Hall and Hall 30). "Americans must take great care not to alienate the French by being casual and informal in their manners; if Americans are not meticulously polite and formal, their message will not get through to the French and they and their product will suffer" (Hall and Hall 28). Dressen-Hammouda's point about different notions of personal space and physical contact in France versus the U.S. correlates with Hall's argument that most people do not think about personal distance as culturally patterned, and therefore, misinterpret foreign spatial cues. As Hall and Hall argue, "When a foreigner appears aggressive and pushy, or remote and cold, it may mean that her or his personal distance is different from yours" (12). The fact that the technical communicators in France interviewed by Dressen-Hammouda provided intercultural communication guidance to Americans that aligns with Hall and Hofstede's theories indicates that deeply-seated aspects of national culture have not been uprooted in our global age.

In conclusion, this literature review demonstrated that there is a great amount of debate surrounding models, theories, and approaches for effective intercultural technical communication. There is also a paucity of information available to American technical communicators who need to develop content for French audiences and who need to collaborate with French technical communicators on intercultural projects. My thesis will contribute to the body of research in intercultural technical communication by surveying a group of French technical communicators. This survey will provide a much-needed examination of the specific information needs of French audiences, and current beliefs, experiences, and practices of French technical communicators, as expressed in their own voices. To my knowledge, no American

researcher has ever closely examined the differences between technical communication in France and the U.S. My thesis will also further investigate the differences and similarities between technical communication in France and the U.S. in terms of Hall's high- and low-context culture model, Hofstede's Individualism versus Collectivism dimension, and the political, economic, social, religious, educational, linguistic, and technological variables advocated by Hofst and Hunsinger. The intent is to provide detailed information to American technical communicators who want to better understand French audiences and technical communication in France, whether as creators of technical documentation, or as colleagues on a global project team. As Hall argues, "One cannot interpret any aspect of culture apart from, and without the cooperation of, the members of a given culture" (*Beyond Culture*, 270).

CHAPTER THREE: METHODOLOGY

As more French technical communicators enter the global marketplace, the level of interaction between French and American technical communicators is sure to increase substantially. Scholars such as Dressen-Hammouda have indicated that Americans will need to consider numerous intercultural factors to facilitate successful collaboration with their French counterparts (172). However, current research does not offer clear-cut methods to guide American technical communicators on how to successfully interact with their French colleagues, or how to develop effective technical documentation for French audiences. This chapter will describe the methods that I have used to learn more about the specific information requirements of French audiences, and the beliefs, experiences, and practices of French technical communicators. I will begin with an overview of the research methods I used for this study. Next I will discuss my study instruments and design, recruitment methods, inclusion and exclusion criteria, data collection, and the process used to analyze the data and to establish credibility and authenticity. I will conclude with a discussion of the theoretical foundation that guides my research.

Research Methods

Given the limited amount of literature available on the practice of technical communication in France and French technical communicators, and my desire to be as free as possible from any pre-conceptions about my research participants' beliefs, experiences, and practices, I selected a qualitative approach for this intercultural communication study. A qualitative approach allows researchers to gather in-depth data without the potential bias imposed by strictly-structured quantitative methods (Creswell 14). Specifically, I developed a

survey (see Appendix A) combining open-ended, partially-categorized, and closed-ended questions in order to gain an in-depth understanding of French technical communicators' intercultural communication beliefs, experiences, and practices, and information, language, and cultural needs. Surveys are a reputable research tool and are used frequently by technical communication researchers. In an article reviewing qualitative research published in the field's top journals from 2003 to 2007, Debbie Davy and Christina Valecillos reported that 67 of the 225 articles (about 30 percent) used surveys (354). Natalia Matveeva is just one of the many technical communication scholars who have used surveys as their primary research method for conducting qualitative research. In her article examining how educators teach intercultural communication in basic technical writing courses, Matveeva offers solid justification for her research method. Matveeva argues that surveys can reach a wider audience than case studies or ethnographies, can be used for "descriptive, exploratory, or explanatory" purposes, and often provide valuable "insights into the characteristics of the population," insights that "form the basis for making better-informed decisions" (392). My survey, like Matveeva's, is descriptive and exploratory, and aims to provide valuable insights to American technical communicators, helping them better understand the intercultural considerations they must address when working with French technical communicators or when creating technical documentation for French audiences.

Online surveying was an especially advantageous method for this research, given my target population and the resources available to conduct my research. Online surveying offered a low-cost means from my U.S. home base for reaching my target population in France, and provided survey respondents with the flexibility to participate in the survey at the time and location most convenient to them. By selecting an online survey, I was able to circumvent some

of the language barriers that I would have been likely to encounter with other qualitative research methods commonly used for intercultural research, such as in-person interviews or focus groups. Although I have full professional fluency in French, conducting interviews or focus groups with French technical communicators would have been difficult without the assistance of a costly expert interpreter who has specialized knowledge in French technical communication terminology. In-person interviews and focus group sessions also require transcription of the verbal proceedings, further compounding the expense of the project. Online surveys, on the other hand, are structured and fixed tools. The language communicated within a survey is the same for all survey participants, and the responses are automatically presented in a written format. Given the structured and fixed format of my online survey, I was able to hire an expert translator for a much more affordable price than a professional interpreter and transcriber. Using a native-French-speaking translator was also a requirement imposed by the University of Central Florida's Institutional Review Board (UCF IRB). Therefore, following IRB approval of the English-language versions, all survey materials (the online survey, consent form, and recruitment materials) were professionally translated by a native-language speaker into French and were distributed in French to all survey participants. Verification of the accuracy of the translation was documented by an objective, third-party consultant, and was submitted to the IRB, along with French versions of all survey materials.

Study Instruments and Design

For this study, I used SurveyMonkey, an online survey tool approved for use by the UCF

IRB, to design an online survey, collect the data, and analyze the results. In addition to gathering data about French technical communicators' intercultural communication beliefs, experiences, and practices, and information, language, and cultural needs, my two-part online survey also gathered demographic and background data, including respondents': current role in the technical communication field, number of years working in the field, age, current industry, educational background, languages spoken, birthplace, nationality, region or city of employment, gender, and annual gross salary. The survey consisted of 25 questions (14 open-ended questions, four multiple-choice questions with a field for participant comments, and seven multiple-choice questions with no field for participant comments). Survey respondents were not required to answer any of the questions they did not wish to answer. The survey was open for one month (from February 18 to March 18, 2013) and took approximately 20 minutes to complete. There were no risks to survey participants and survey responses were kept strictly confidential. All data has been stored in a password-protected electronic format (https/SSL encryption). To avoid potential language barriers and increase response rates, the survey was conducted in French. To ensure maximum quality and clarity of the French-language survey, and to ensure that participants' responses in French were accurately translated into English, I consulted with a professional, native-language translator throughout the duration of this project.

Recruitment Methods

Following approval from the UCF IRB, I worked with the President of the Society for Technical Communication France (STC France), Mr. Stuart Culshaw, to post a call for survey participants on STC France's LinkedIn group page and to issue a call for participants in the

March issue of the STC France electronic newsletter. This method of purposeful sampling was used to ensure that data was collected from survey participants who were best qualified to answer the research questions posed in this thesis (Creswell 217). The call for survey participants was conducted in French and targeted technical communicators in France who had experience working on intercultural technical communication projects, particularly those who had experience working with Americans. This call was translated into French by a professional, native-language translator, following the UCF IRB's approval of the English-language version. At the time of the survey period, there were 50 active STC France members and 331 STC France LinkedIn group members. A 2006 salary survey issued by STC France to its member base and mailing list of non-members yielded 57 results (STC France website) Because my survey was distributed to an audience base similar to STC France's salary survey, I aimed for a comparable response rate.

Inclusion and Exclusion Criteria

All technical communication professionals who were at least 18 years of age and had at least one year of experience practicing technical communication in France were eligible to participate in this survey. I screened for eligibility by working with Mr. Culshaw to distribute the survey to active members of STC France, and members and non-members who were part of STC France social media networks or who were subscribers to the STC France electronic newsletter. My final study sample includes all native-French-speaking technical communicators who have practiced technical communication in France for at least one year. Survey respondents who were not native French speakers were excluded from the final study sample because this survey aimed

specifically to uncover the advice and best practices that native French technical communicators have for Americans working on projects for French audiences, or who are collaborating with French counterparts.

Data Collection, Analysis, Credibility, and Authenticity

For the open-ended and closed-ended questions of my survey, I used SurveyMonkey's "analyze results" feature to generate and analyze the results. The "analyze results" feature allowed me to download the entire response set for my survey for importing into a spreadsheet or database. SurveyMonkey offers five formats for downloading the results: CSV, Excel, XML, HTML, or PDF. Because I wanted to view each report individually, and textually analyze the results using Microsoft Word, I separated the responses by participant, and copied and pasted each survey participant's responses directly from SurveyMonkey, into an individual Microsoft Word document. I assigned each participant a number which correlated with the order in which the respondent completed the survey. For example, the first respondent to complete the survey was coded as "Survey Respondent 1" and so on. The file name for each Word document followed a similar naming convention (for example, Survey Respondent 1_FR.docx, with "FR" indicating that the document contained the French version of the survey results). Each report was saved and stored on a password-protected computer. I then separated the responses to the closed-ended questions from the responses to the open-ended questions. For the closed-ended survey questions, I translated the responses from French into English myself, using the original English-to-French survey translation provided by the professional translator as a guide. I created new Word documents for these responses, which I saved, for example, as "Survey Respondent 1_EN.

docx,” with the “EN” indicating that the document contained the translated English version of the survey responses. I gathered all of the survey respondents’ original French responses to the open-ended questions into one document and sent them to a professional French-to-English translator for processing. After I received the English version of the responses from the translator, I added the open-ended English responses to the Word document containing the English closed-ended responses, and created a complete report of survey results in English for each participant.

After I collected all of the survey data, I began engaging in inductive thematic analysis. Thematic analysis has been popularized by several researchers including Virginia Braun and Victoria Clarke, Richard E. Boyatzis, and Greg Guest et al. Braun and Clarke define thematic analysis as “a method for identifying, analyzing, and reporting patterns (themes) within data” (79). The authors argue that thematic analysis is the “first qualitative method of analysis that researchers should learn” and that the method offers the potential to provide a “rich and detailed, yet complex account of data” (78-79). Thematic analysis, according to Braun and Clarke, is a six-phase process that can be summarized as follows:

- Phase 1: Familiarize yourself with your data. Read and re-read the data, and write down initial ideas.
- Phase 2: Generate initial codes. Code interesting features of the data systematically across the whole data set.
- Phase 3: Search for themes. Organize codes into possible themes and assemble data relevant to each of these themes.

- Phase 4: Review the themes. Verify whether the themes are relevant to both the coded extracts and the complete data set. Use this review to generate a thematic map of the analysis.
- Phase 5: Define and name the themes. Continue the process of analysis in order to enhance the details of each theme and the overall story told by the analysis. Create unambiguous definitions and names for each of the themes.
- Phase 6: Produce the report. Select “vivid, compelling extract examples,” perform final analysis of the selected extracts, relate this selection back to the analysis of the research questions and literature on the research topic, and write a scholarly report of the analysis (87).

In order to generate the report of the analysis (phase 6) that will be discussed in the next chapter of this thesis, I engaged in phases 1-5, as recommended by Braun and Clarke. Before generating the initial codes, I read through the complete report for each participant two times to familiarize myself with the data. After reading each report twice, I began the process of generating initial codes, searching for themes and creating an initial thematic map. Next, I cross-checked these themes across the coded extracts and across the complete data set to generate a more developed thematic map. Then, I defined and named the themes and created a final thematic map. It is important to note that an inductive approach to thematic analysis (versus a theoretical approach) means that the themes identified by the researcher are strongly linked to the data themselves and may have no relation to the specific questions that were asked of the research participants (Braun and Clarke 83). This data-driven approach requires the researcher to code the data without attempting to fit it into a pre-determined coding frame, or the researcher’s analytic

preconceptions (Braun and Clarke 83). The researcher reads and re-reads the data for themes, and codes the data without regard for themes that previous research on the topic may have identified (Braun and Clarke 84). The level at which I identified my themes can be categorized as what Braun and Clarke refer to as “semantic or explicit” (84). This approach involves identifying themes within “the explicit or surface meanings of the data,” without looking for meaning outside of what each participant has written (Braun and Clarke 84). However, beyond just describing the themes that I have uncovered, I will take my inductive thematic analysis one step further to interpret the significance of the themes and their broader meanings and implications. These themes, which will be reported in the next chapter, will build understanding and offer technical communication practitioners and scholars new knowledge about intercultural technical communication between the U.S. and France, and will serve as the basis for providing solid recommendations for future research. As Tiffany Craft Portewig argues, identifying themes in the collected data lends validity to overall research conclusions (151-52).

Because qualitative research is often met with skepticism, I took extra steps to establish the credibility and authenticity of my findings. For example, I used triangulation methods to increase the credibility of my findings, following up with respondents who indicated in the survey that they were open to discussing their responses in greater detail (Sullivan and Spilka 11-12). To determine authenticity, I also used respondent validation (also known as member checking) to test initial survey results with these same respondents who indicated that they were open to discussing their responses in greater detail, and who had provided an email address as a means for contacting them (Sullivan and Spilka 12-13). An initial request to verify the survey results was sent by email, in French, to four survey respondents. Three of those respondents

replied. All three of those respondents indicated in the survey that they spoke English with native or bilingual, full-professional, or professional-working proficiency. Given their fluency, I asked the three respondents to cross-check the authenticity of their initial French survey responses, along with the professionally translated English versions of their responses. All three verified the authenticity of the French and English results that I had reported for their survey responses. Those respondents also provided feedback on the categories and themes that I had developed from the open-ended survey responses. This feedback will be discussed in more detail in the next chapter of this thesis.

Theoretical Foundation

One of the benefits of using thematic analysis is that the method is not tied to any particular theoretical framework, allowing researchers a great range of flexibility (Braun and Clarke 81). While other common analytic methods—such as interpretative phenomenological analysis or grounded theory—require the researcher to direct their data analysis specifically toward theory development, thematic analysis permits the researcher to describe patterns across qualitative data without committing to the rigorous process of theory generation (Braun and Clarke 80-81). As Braun and Clarke note, “thematic analysis can offer a more accessible form of analysis, particularly for those early in a qualitative research career” (81). Given its accessibility and theoretical flexibility, this method matched well with my applied research goals, limited experience in qualitative research, and relatively small data corpus. In order to conduct thematic analysis properly, however, researchers must make clear the theoretical position of their thematic analysis (Braun and Clarke 81). Most thematic analysis is conducted using one of three

theoretical foundations: an “essentialist or realist” foundation, a “constructionist” foundation, or a “contextualist” foundation (Braun and Clarke 81). An essentialist or realist foundation focuses on reporting experiences, meanings, and the reality of participants; a constructionist foundation focuses on examining the ways in which the experiences, meanings, and realities are the effects of a range of “discourses operating within a society;” a contextualist foundation focuses on acknowledging the ways that individuals make meaning of their experiences, and the ways that the “broader social context impinges on those meanings, while retaining focus on the material and other limits of ‘reality’” (Braun and Clarke 81). For this thesis, I used an essentialist or realist theoretical foundation because it is my goal to present my survey respondents’ experiences and opinions in the most straightforward way possible. An essentialist or realist theoretical foundation allows me to operate under the assumption that “language reflects and enables us to articulate meanings and experiences” (Braun and Clarke 85). In the next chapter of this thesis, I will present the findings of my research study.

CHAPTER FOUR: SURVEY OF FRENCH TECHNICAL COMMUNICATORS - FINDINGS AND DISCUSSION

This chapter presents, analyzes, and discusses the data I collected by conducting a qualitative online survey of technical communication practitioners in France. To briefly summarize, the purpose of this survey was to fill a gap in the current research by learning more about technical communication in France, and ways that American technical communicators can work more effectively with their French counterparts and create more effective technical documentation for French audiences.

The survey was posted on the Society for Technical Communication France (STC France)'s LinkedIn group page and was included in the March issue of the STC France electronic newsletter. A total of 15 technical communicators attempted the survey during the one-month survey period; ten of those fifteen technical communicators submitted the survey; seven of the ten answered the demographic questions with enough detail for me to determine whether or not they met the eligibility criteria for the survey. Of those seven, one survey respondent was American, one was French Canadian, and one was Irish. Survey respondents who were not French by birth were excluded from the final study sample because this survey aimed specifically to uncover the advice and best practices that native French technical communicators have for Americans working on projects for French audiences, or in collaboration with their French counterparts. Therefore, a total of four survey respondents met the eligibility requirements.

To interpret the rich data submitted by these four survey respondents, I used inductive thematic analysis. Inductive thematic analysis is a process of “identifying, analyzing, and

reporting patterns (themes) within data” (Braun and Clarke 79). This method of analysis is ideal for researchers who are new to qualitative analysis because it is relatively easy to learn and has the potential to provide a “rich and detailed, yet complex account of data” (Braun and Clarke 78-79). Thematic analysis also works well for small sample sizes, where descriptive, rather than quantitative, coding and reporting of results are desired (Boyatzis 129). Because of the small size of my survey sample, the results of my inductive thematic analysis do not imply generalization to the larger population of French technical communicators, but merely offer description.

In this chapter, I will present a profile of each of the four survey respondents, provide a description of the general findings of my survey, identify the common themes that I found among the survey responses, and discuss what these themes could mean for American technical communicators operating in intercultural contexts. I will conclude by discussing the limitations of my research and by offering suggestions for overcoming these limitations.

Description of Survey Respondents

In this section, the technical communication practitioners who responded to my survey are described in detail. All four of these technical communication practitioners are women, are French by birth, currently live and work in France, and have at least one year of experience in the field. For confidentiality purposes, the survey respondents will be referred to from this point forward as Survey Respondents A, B, C, and D.

Survey Respondent A defines her current primary role in the technical communication field as a technical writer, information developer, educator, translator, and head of risk management and safety issues. She occupies a mid-level, non-supervisory position in the

manufacturing industry (machine tools/metallurgy). She has been working in the technical communication field for fewer than five years, is in her thirties, has the French equivalent of a bachelor's degree, and speaks four languages: French, English (native or bilingual proficiency), Portuguese, and German. She has worked on five or fewer technical communication projects for clients based in the United States (U.S.).

Survey Respondent B defines her current primary role in the technical communication field as a technical writer and documentation manager. She occupies a senior-level supervisory position in the dental industry. She has been working in the technical communication field for more than ten years, is in her thirties, has the French equivalent of a master's degree, and speaks six languages: French, English (full professional proficiency), Dutch, German, Italian, and Breton (a Celtic language spoken in the coastal province of Brittany, France). She has worked on more than five technical communication projects for clients based in the U.S.

Survey Respondent C defines her current primary role in the technical communication field as a consultant. She occupies a senior-level, non-supervisory position as a consultant to clients spanning the computer software, telecommunications, and education industries. She has been working in the technical communication field for more than five years, is in her thirties, has the French equivalent of a bachelor's degree, and speaks three languages: French, English (professional working proficiency), and Italian. She has worked on five or fewer technical communication projects for clients based in the U.S.

Survey Respondent D defines her current primary role in the technical communication field as a technical writer and technical editor. She occupies a senior-level, non-supervisory position in the computer software industry. She has been working in the technical

communication field for more than 20 years, is over the age of 50, has the French equivalent of a bachelor's degree, and speaks two languages: French and English (professional working proficiency). She has worked on more than 20 technical communication projects for clients based in the U.S.

In the next section of this chapter, I will report on the overall findings of my survey based on an analysis of the respondents' answers to the open-ended survey questions. Because of my small survey sample, and consequent lack of ability to generalize my findings, I will report these findings using rich description.

General Findings

Survey respondents were asked a series of questions about their intercultural technical communication beliefs, experiences, and practices, and their information, language, and cultural needs. The overarching findings of my survey fall into these categories: experience working with Americans, and intercultural challenges facing technical communicators in France.

Experience Working with Americans

When asked to describe her experience working with American colleagues, Survey Respondent B, who indicated that she had worked on more than five technical communication projects for clients based in the U.S., described her experiences rather negatively:

My colleagues had the attitude of 'I can do it myself,' so there's no need to ask the French, which directly damaged the quality of their produced work. For example, they wouldn't come to us to reuse content, but would extract images

from the PDFs and they rewrote our instructions ‘their way.’ The result: erroneous instructions and poor-quality illustrations.

In response to a follow-up email that I sent during the respondent-validation phase of my project, Survey Respondent B offered some additional information on her experience working with American technical writers:

North American writers sometimes don’t know who produced the notices or information they are using. However, once they realized we [French writers] exist, there were generally a few weeks of quite productive communication, then the pace slowed down until the communication stopped. Several reasons may explain this: time differences, the sometimes difficult comprehension over the telephone, the pressure of the managing staff...

Jay F. Nunamaker Jr. et al. echo Survey Respondent B’s analysis of the common challenges facing global virtual teams. The authors speak specifically to difficulties that stem from reduced non-verbal cues; loss of mechanisms for informal conversation; decreased opportunities to form friendships; time zone disparity; complex, undependable technology; the need to build consensus at a distance; the need to establish shared meaning at a distance; divergent work processes; and dissimilar cultures (114).

Survey Respondent D, who indicated that she had worked on more than 20 technical communication projects for clients based in the U.S., provided a generally positive description of her American colleagues. She described her American colleagues as “kindly, unemotional, constructive, bearers of competence.” While this description does not provide detail about the

quality of her intercultural interactions, it implies a lack of tension or conflict. Survey Respondents A and C did not respond to this survey question. These two survey respondents indicated in a previous survey question that they had worked on five or fewer technical communication projects for clients based in the U.S. They may, therefore, have not had enough experience working with Americans to respond to the question in detail. In response to a follow-up email that I sent as part of the respondent-validation phase, Survey Respondent A provided more detail about her lack of experience working with Americans: “It’s true that I can’t really give my opinion about projects in collaboration with Americans. However, trends from North America are quite present in this profession in France.” In discussing these trends, Survey Respondent A pointed out that the majority of technical communicators in France work in the software industry, and that technical communication in France is concerned with “the nature of information and its correct form and expression.” Survey Respondent A specifically mentioned minimalism and Darwin Information Typing Architecture (DITA)⁴ as current trends coming from the U.S. that she and her French colleagues are closely following.

Intercultural Challenges Facing Technical Communicators in France

When asked to identify the biggest challenge facing technical communicators working on intercultural communication projects in France, Survey Respondent A said, “Localization, but also adapting to the cultures of various jobs (age brackets, different business cultures depending

⁴ DITA is a method of technical writing and publishing based on Extensible Markup Language (XML) and involves practices such as modularity (writing documentation in components), single-sourcing (using the same source content to produce different documentation products in multi-media formats), and content re-use.

on the job category, etc.)”. Survey Respondent B said that the biggest challenge was “Adapting to the ‘other.’” The challenge of “adapting” that Survey Respondents A and B refer to above is explicated further in these remarks from Survey Respondent B:

French culture is very focused on itself, and is rather self-satisfied, and not very didactic. The main challenge is understanding one or several audiences without the judgment of the French getting in the way of communication. I often hear, ‘They’ll understand, they’re not stupid!’, but the problem isn’t that, but rather that the target audience is used to a certain medium to validate knowledge or solve a problem.

The description of French culture as “focused on itself” could be attributed to Hofstede’s description of France as an Individualist society. In a highly Individualist culture, an “I” consciousness is standard; emphasis is placed on self-orientation, identity is based on the individual, and individual initiative and achievement is valued (*Culture’s Consequences* 171).

Survey Respondent D pointed to a challenge of a different type, stating that the biggest challenge facing technical communicators working on intercultural communication projects in France is “the costs of a GOOD [original emphasis] translation/localization.” Flacke confirms the high costs of a quality translation in her article, “The Hidden Costs of Cross-Cultural Documentation.” Flacke uses the European Union, which racks up a translation bill of nearly one billion Euros a year, as a “striking example” of how expensive translation can be (70).

In the next section, I will discuss the themes that I developed from an analysis of the respondents’ answers to the open-ended questions of my survey.

Common Themes

I discovered several themes as a result of my inductive analysis of the responses to my open-ended survey questions. Some of these themes were developed from structural coding (coding at the level of individual survey questions) and some were developed from coding across the entire data set. Figure 2 features the final thematic map that I developed as a result of this process. This map is included for transparency and accountability purposes, and to provide a visual representation of the mapping process that an inductive thematic analysis entails. In the process of selecting final themes, I selected those that appeared the most consistently across the data set.

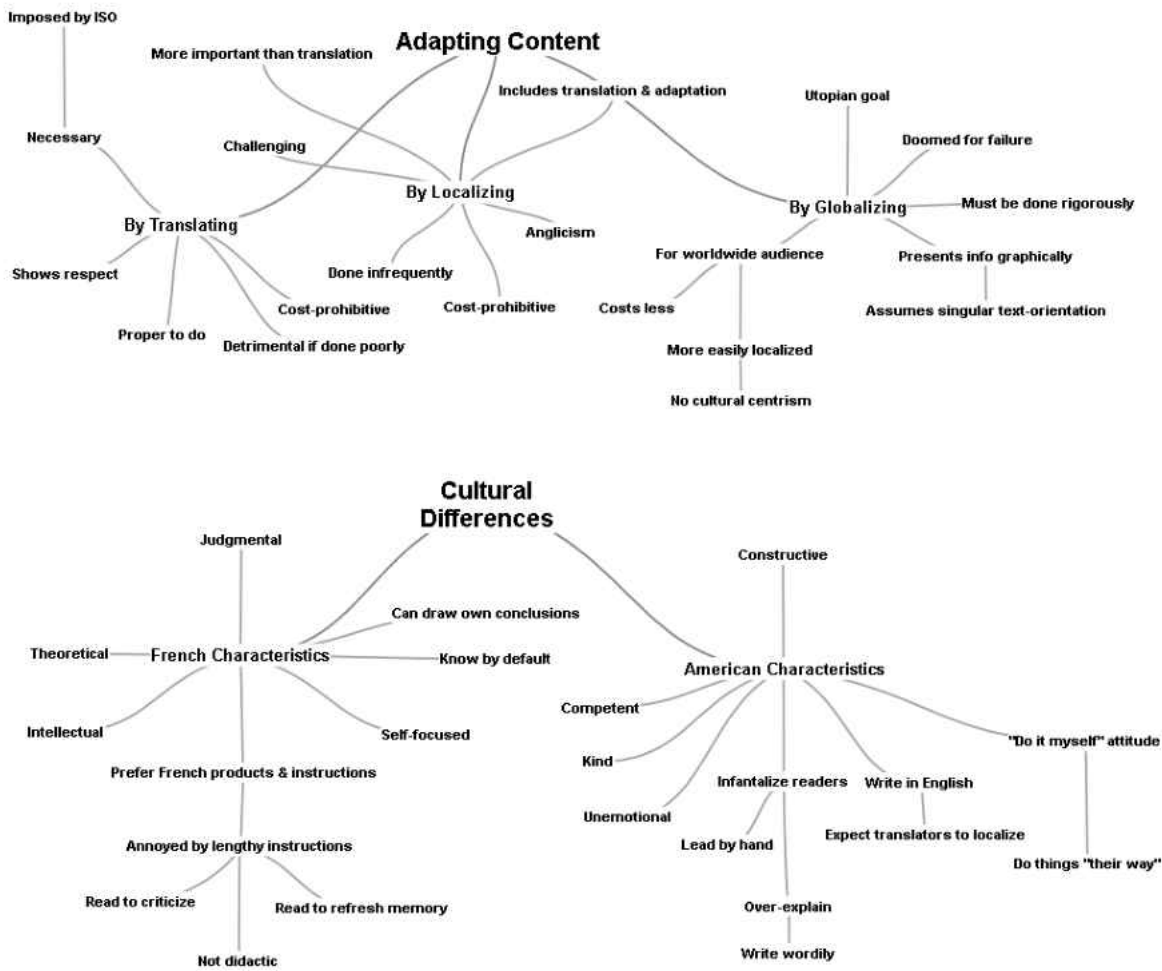


Figure 2: Final Thematic Map

As shown in Figure 2, two main themes developed as a result of my inductive analysis: the importance of adapting content to French audiences, and the cultural differences between French and American information needs and communication styles. In the next two sections of this chapter, I will provide a description of these two themes and will demonstrate how the themes are reflected throughout the respondents’ answers to my open-ended survey questions.

Theme 1: The Importance of Adapting Content to French Audiences

The first theme developed during my inductive thematic analysis relates to a belief in the importance of adapting documentation specifically to the needs of French audiences. This theme suggests that the French technical communicators surveyed believe that localization and translation are an important part of the documentation process. This theme also suggests that attempts to standardize or globalize documentation, while perhaps more cost-effective, will generally not be as well-received by French audiences as fully-localized documentation. This theme began to emerge in the analysis of survey respondents' answers to questions related to localization, translation, and globalization. In response to a question asking if she thought it was important to localize content for French audiences, Survey Respondent A said, "If content is meant for a public, it should be adapted to it." Survey Respondent B emphatically expressed the importance of localizing content for French audiences and indicated that the importance of this practice should be evident. She provided two reasons for why she thought localization was important:

1. An audience that has the choice between Product A with instructions in Chinglish and Product B that is produced locally and with instructions in French would choose Product B.
2. Out of respect for users, it is proper to address them in their native language.

Survey Respondent C also expressed a strong belief in the importance of localizing content for French audiences.

It is absolutely necessary to adapt communication to a French audience. The effort to comprehend something (here meaning the cognitive engagement necessary to acquire information) in a foreign language is considerably too great. Even worse: a translation of an interface into the language in the documentation but not in the product, or a poor translation of the documentation, makes products awful to use.

Survey Respondent D also emphasized the importance of localizing content for French audiences, stating that “of course” she found it important because “you’re more willing to go with the language you speak, so you’d be more efficient in your interaction with the product, service, etc.” This opinion resonates with the research presented by Flacke in “The Hidden Costs of Cross-Cultural Documentation.” In this article, Flacke argues, “Not only do users prefer a product in their own language, but they also welcome documentation that fits into their culture” (70). In this same article, Flacke also speaks to the importance of respecting an audience’s culture—a point emphasized by Survey Respondent B. Quoting Layden⁵, Flacke argues, “Now, more than ever, showing respect for your customer’s culture is crucial to your product’s success in the overseas marketplace” (72). When asked about the process of localizing American source documentation for French audiences, Survey Respondent B lamented that this process was “usually done very little, which is too bad.” Survey Respondent C responded by stating that, “More than a translation, an adaption is also needed: a support contact telephone in Florida would do nobody in Clermont-Ferrard any good. Rules and standards are not the same in

⁵ The primary source of this quote is unavailable. Flacke cited the author as “J. Layden.” Flacke did not provide a publication title and the hyperlink that she provided to this work in the references section of her article is broken.

Europe.”

Survey questions asking about the importance of translation struck a chord with respondents. When asked about the importance of translation and whether she was more likely to read content that is presented in French, Survey Respondent A described translation as “very important.” She explained that her company is located in France, Germany, and Russia and that she and her colleagues have to juggle between the three main languages of these countries.

Not all of our technicians speak all of these languages and we only use English sporadically as a lingua franca. Information should be available for each of us, so translation is very important.

In response to a follow-up email, Survey Respondent A provided additional information on the importance of translation.

In ‘machine’ industries (subject to Directive 2006/42/CE) within the European Union, documentation must be presented in one of the languages of the Union. Most manufacturers in member states provide their documentation in the language of the country the machine will be exported to. I think that multilingualism, and therefore translation, are very important for most Europeans. In the case of the French, translation has specific importance compared with other countries because there are still many people who don’t speak fluent English. Moreover, the French are very sensitive about the French language and tend to get a bad impression with a document, website, etc. that is poorly translated.

Survey Respondent B echoed Survey Respondent A's opinion on the importance of translation, stating that she was "evidently" more inclined to read content that is presented in French. She also noted that translating products and related documentation into French for sale in France is a legal requirement:

In order to sell a product in Europe, the user documents must be available in at least one of the official languages of the country where the product will be sold. This is imposed by Standard IEC 62079_2001. Providing instructions in English only is simply not possible.

Survey Respondent C did not offer an explanation about why she thought translation was important, but indicated that she was more likely to read content that is presented in French.

Survey Respondent D simply stated, "Translation is VERY [original emphasis] important."

Scholars such as Hoft confirm that France requires translation of all documentation entering the country, and the added importance that survey respondents placed on localizing and translating content is likely a direct reflection of the way that the technical communication profession has developed in France (179). Patricia Minacori and Lucy Veisblat argue that many French technical communication professionals were former translators, and that specialized academic programs in technical communication have just recently developed (752-53). It is also interesting to note that the French technical communicators surveyed sometimes understood the terms "localization" and "translation" to be one in the same, responding to questions that asked specifically about localization as if the questions were limited to linguistic issues, rather than encompassing broader cultural considerations. This is a trend that has also been noted by Han Yu and Gerald Savage, who write, "Although in academic and classroom discussions, we often

separate these two concepts [translation and localization], it appears that a number of our industry practitioners use them interchangeably” (13). The authors recognize that because a good translation “considers language, culture, customs, technical and other characteristics of the target locale,” the process that academics call “localization” may seem to be a natural and obvious part of the process that practitioners refer to as “translation” (Yu and Savage 14). The lack of a proper French equivalent for the term “localization” could also explain French survey respondents’ interchangeable use of the terms “localization” and “translation.” Survey Respondent D specifically referred to the term “localization” as an “Anglicism.”

Survey respondents’ views on taking a globalized approach to creating technical documentation were also revealing. When asked if there were times when globalizing content (standardizing) is more effective than localizing the document (tailoring the document to the needs of a specific national culture), Survey Respondent A replied that there might be times when a globalized approach is better, but that the documentation would have to be “designed very rigorously.” She offered safety pictograms as a potentially good example of effective content globalization. Survey Respondent B offered an example that she thought illustrated this process well: Quick Starts and Quick Cleans.

A ‘Quick’ is an agnostic document from a linguistic point of view. It presents installation and cleaning instructions graphically, and is immediately readable by users. The real motivation for this was to save on translation costs. The sub-tangent assumption is that all cultures read from left to right and from top to bottom...

It is interesting to note that Survey Respondent B defined “globalization” (as the term applies to the field of technical communication) as a “utopian goal enabling human societies with different values and modes of operation to understand technological elements in a single way,” a goal that she said was “doomed for failure.” This negative view of globalization coincides with Miles A. Kimball and Ann R. Hawkins’ argument that globalized documents can “never hope to speak successfully to people of all cultures, and this approach often produces oversimplified, unsuccessful documents” (56). Cost is certainly an important factor for technical communicators in determining whether to localize or globalize a document. Survey Respondent C explained that “Content meant for a worldwide audience is more easily localizable (and costs less) because it has already been created outside of the original cultural centrism.” As Kimball and Hawkins note, “localization inevitably costs more than globalization, making some organizations reluctant to invest in this practice except for their most mission-critical communications” (57). Cost notwithstanding, survey respondents overwhelmingly indicated their preference for localized approaches to adapting content to a French audience. Survey respondents see globalization as a mere step in the more essential process of content localization, or as an approach to be used when information must be presented graphically to facilitate understanding by an audience made up of people who speak different languages.

The next section of this chapter will discuss the second theme uncovered in my inductive thematic analysis.

Theme 2: Cultural Differences in Information Needs and Communication Styles

The second theme that emerged from my inductive thematic analysis of the respondents' answers to my open-ended survey questions relates to the perceived differences in the amount of information needed in various communication settings. This theme suggests that the French technical communication practitioners surveyed have very specific ideas about the amount of information that should be provided to a French audience, and how providing too much information can have negative consequences on the reception and adoption of the documentation. Hall classifies the U.S. as a low-context culture and France as a high-context culture, and provides different approaches to communicating with people in each country based on these contextual differences. According to Hall, high-context people, like the French, do not require as much explicit information in any communication encounter because much of the meaning resides in a shared cultural context. Hall argues that high-context people are likely to grow "impatient and irritated" when low-context people provide more information than is needed (Hall and Hall 9).

Applying the principles of contexting to the practice of technical communication tells us that American technical communicators who work with French technical communicators should be sensitive to the differences that exist between the low-context American culture and the high-context French culture, and that American technical communicators will need to develop technical documentation for French audiences according to the information needs of a high-context culture. The need for less explicit information among the members of the high-context

French culture is evidenced in the responses provided by the French technical communicators who participated in my survey.

When asked what advice she would give to American technical communicators who are working on technical content for French audiences, Survey Respondent B offered very specific guidance to American technical communication practitioners: Do not talk to French audiences as if they were children.

There's no use talking to users as if they were six-year-olds. North Americans tend to explain everything, even explain too much, including obvious things. A European audience is used to long explanations, and they are able to concentrate and arrive at conclusions alone, which you wouldn't necessarily expect from a North American audience. Leading the reader by the hand all the way through a procedure is often taken badly by a European audience.

Paul V. Anderson attests to this point, arguing that people in high-context cultures, like France, expect readers to have adequate background knowledge and experience before they begin reading a communication. With regard to instructions, Anderson argues that in high-context cultures, there is no need to explain the different tools used or to walk readers through all the steps needed to accomplish a task (80). The opposite is true in low-context cultures, like the U.S., where readers are assumed to know little about the communication before they begin reading and expect detailed writing that explains the entire process (80). Anderson encourages technical writers to consider the cultural background of their audience so that readers are not insulted by being given too much or too little information (80).

During the respondent-validation phase of my research, Survey Respondent B reiterated

her opinion that the French and Americans differ in information needs and communication styles. Survey Respondent B explained that an area that exemplifies the contextual differences between U.S. and French cultures is film plots.

Compare two remakes, a North American one and a French one and the difference is flagrant. North American films are much more explicit and direct, whereas French films expect the viewer to engage in a dialogue with the work and to be frustrated from time to time.

Survey Respondent D indicated confusion about the question, and asked, “Are there cases where American communicators would write only in French for French people?” She then wrote, “In my experience, they [American technical communication practitioners] write in English for everyone all over the world, and it’s up to the translators to adapt to their audience.” She also offered some general advice that she categorized as “non-specific to a French audience.” This advice included familiarizing oneself with the “technical level of future readers.” She emphasized that there is “no use repeating the basics to non-beginners.” She also recommended that technical communicators “write less wordily and more concisely,” which directly correlates with the information needs of a high-context culture. During the respondent-validation phase of my research, I asked Survey Respondent D whether she agreed that American technical communicators have a tendency to infantilize their audience, and over-explain things. While not entirely disagreeing with the assessment, Survey Respondent D cautioned me against making black-and-white statements about differences between French and American culture.

I would avoid saying flat out that Americans ‘infantilize’ their audience. This is only an opinion, and is far from being valid in every instance. If you want to highlight a cultural difference, you should do so in a more positive light and look for it in how Americans are more concrete, and the French are more abstract and theoretical. Also, in the U.S., there is a culture of success that encourages breaking things down into easy-to-do actions, then congratulating the user after doing them.

Survey Respondent D’s choice to frame her comparison of French and American cultures in what she perceived as a more positive light, does not detract from the differences in cultural contextualization that are evidenced by this data. The notion that Americans are more “concrete” and that American culture encourages “breaking things down into easy-to-do actions” is a direct reflection of a low-context culture’s desire for explicit information and explicit communication. Mike Markel notes that in low-context cultures, writers explain procedures in explicit detail, and in high-context cultures, writers “tend to omit information that they consider obvious because they don’t want to insult the reader” (95). Markel’s example of how instructions for a television user manual might be more detailed in the U.S. than in France further illustrates this point. Markel argues that a manual written for a high-context culture, like the French, might not mention that a remote control for a television needs batteries because it is considered common knowledge (95).

The cultural considerations that French technical communicators advise Americans to keep in mind when preparing content for French audiences also further demonstrate France’s status as a high-context culture. In response to a question on this topic, Survey Respondent B

replied that Americans should keep in mind that the French “know by default, and they read instructions only to criticize them or just to refresh their memory.” This opinion resonates with Hall’s research, which indicates that members of high-context cultures know what to do and think based on years of interaction with each other, engage in less verbally explicit communication, have less written and formal information, and more internalized understandings of what is communicated. Survey Respondent B offered a general observation that “the French are more theoretical and ‘intellectual’” and that “American writers don’t necessarily know this.” The French’s strong affinity for the abstract and theoretical has been noted by scholars such as Richard D. Lewis (203). Lewis also argues that the French “believe they are intellectually superior to any other nationality” (257) and that American English seems “anti-intellectual to them” (259). Statements of this nature border on stereotypes, and while the French could potentially be categorized as “more theoretical and intellectual” than Americans, I recommend that American technical communicators refrain from adopting these generalizations when localizing content for French audiences.

The final section of this chapter will discuss the limitations of this research and will offer ways that American technical communication practitioners and scholars who are interested in conducting similar research may overcome these limitations.

Research Limitations

The whole process of surveying technical communicators in France was a lesson in effective intercultural communication. Despite the support I received from the President of STC

France, I had an extremely hard time recruiting participants. Considering the low response rate to my survey, I must question whether French technical communicators have an interest in strengthening intercultural ties with their American counterparts. In *When Cultures Collide: Leading across Cultures*, Lewis argues that France and the U.S. are among the five national cultures that show the most reluctance to learn about other cultures, and that these countries have been “particularly insensitive in their handling of intercultural issues” (102). Lewis attributes this reluctance to such factors as having a large economy, which “endows them [France and the U.S.] with a certain sense of complacency” (102). Lewis argues that France’s reluctance stems for its assumption that it “could continue indefinitely the ways of the Empire,” which functioned with a singular language, authority, educational system, code of ethics, jurisdiction, and method of conducting business (102). Lewis argues that the U.S. fails to comprehend other cultures due to “isolation” or “insularity,” which can be both “geographical and mental” (102). Lack of openness on the part of both France and the U.S. could be a key contributing factor to the lack of solid relationships between French and American technical communicators.

The low response rate to my survey could, however, be attributed to entirely different factors. It is possible that the members of STC France did not read the call for survey participants posted by the Chapter President on the LinkedIn group page, or the call posted in the organizational newsletter. There is also the matter of the design of the survey itself. Before distribution, I asked a French translator, who was also a member of STC France, to review the survey and identify any potential points of misunderstanding. She indicated, as did the professional translator who provided translation verification services, that there were no foreseeable problems with the survey. However, in examining the results of the survey, some

survey respondents indicated that they did not understand certain survey questions or that they found certain questions to be too vague or general.

In response to the call for survey participants that the President of STC France posted on the STC France LinkedIn group page, two survey respondents commented on the design of my survey. One said that the research asked important questions, but did not provide a lot of options for survey respondents to answer the questions, and expressed her opinion that I should have asked at least one question about survey respondents' technical translation knowledge and experience. Another survey respondent, who was American by birth, and therefore, not included in the final survey sample, said that he agreed that the survey had some "poorly thought-out questions," but commended my effort to better understand intercultural technical communication, whether in France, or elsewhere in the world, and said he fully supported this type of research.

There are also indicators that the members of the STC France Chapter may lack the intercultural experience to participate in a survey on this topic. In 2011, the President of STC France, Mr. Stuart Culshaw, posted a call on the STC France website for story contributions to a collection on intercultural technical communication (Culshaw). The collection was to be edited by Professor Han Yu of Kansas State University and Professor Gerald Savage of Illinois State University. The collection was "designed for technical communicators to tell their stories working in international and cross-cultural contexts, working for/with clients/colleagues from diverse cultural backgrounds, or writing/designing for audiences from diverse cultural backgrounds" (Culshaw). The editors added, "We hope this collection will be a venue for contributors to share their experiences and lessons-learned, to inform and educate fellow

practitioners, and to demonstrate their value-add [sic] to employers and clients” (Culshaw). The collection was published in February 2013 and titled, *Negotiating Cultural Encounters: Narrating Intercultural Engineering and Technical Communication*. Although calls for contributions were issued to the members of STC France, not a single one of the twelve published stories is authored by a French person. The lack of inclusion of submissions from French technical communicators could be a further indication of limited intercultural technical communication experience, or a general French reticence to calls for participation in intercultural technical communication practice and research.

The STC France leadership team has also experienced difficulty when requesting feedback from Chapter members. In a 2010 open letter to members, posted on the STC France website, the immediate-past Chapter President, Mr. Ray Gallon, wrote, “There are gray areas we need to address, and the steps we take largely reflect what is important to you.” Among the areas on which Mr. Gallon asked for feedback were the STC France newsletter and community channels. He wrote “...we have little idea if anyone on the receiving end is reading the newsletters, or finds it [sic] useful” (Gallon). Mr. Gallon announced that he would be distributing a series of 2010/11 STC France Membership Surveys to address questions related to STC France members’ preferred communication channels and other matters related to STC France resources and programs. He encouraged survey participation by imploring members to “please take the time to fill them out and return them to us. It only takes a few minutes, and it’s one of the most important things you can do to ensure a future [sic] of STC France” (Gallon). The results of these surveys are not posted on the STC France website, so it is not possible to measure the response rate, nor determine for certain whether the surveys were distributed as planned. The last survey

results to appear on the STC France website are from the “2006 France Salary Survey.” This survey was sent to more than 400 people and received 57 responses (STC France website).

Participation in surveys on various topics, even surveys that have no more than ten questions, do not, therefore, appear to be popular with STC France members.

In an attempt to gain better understanding of the French perspective on survey participation, I sent private messages to two STC France LinkedIn members who had taken my survey and who had indicated via a post on the LinkedIn group page that my survey could be improved. I asked the respondents what particular recommendations they had. One of those two respondents stated that she would have liked to see at least one survey question about technical translation, so I also asked her if there was anything in particular on this subject that she would like American technical communicators to know. Neither of these STC France members, one French and one American, responded to my private messages. Because I was concerned about a potential design flaw with my survey questions, I wrote to a French technical translator, who shares membership with me in the STC France LinkedIn group, to see if she could identify any egregious errors. She responded that she did not think there were any problems with the survey itself, and recommended that I also seek the opinion of a colleague of hers, who had more experience in technical writing and might be able to offer a more informed opinion. With my permission, the technical translator forwarded my survey to her colleague, who provided the following feedback on my survey⁶:

I began answering Nicole Tallman’s questionnaire, but unfortunately, I quickly gave up. I think her questionnaire is far too long. 20 minutes is discouraging, and

⁶ This feedback has been translated from the original French.

unfortunately, the study description is not very engaging and is a hard sell.

From the first question, I said to myself that this study was not necessarily for me. I have never had the occasion to work with American colleagues. Her study supposes collaboration between American writers and French writers, but I doubt that this is truly the case in everyday life. At [name of former employer], I wrote documents in French and had them translated by an independent translator who used a translation memory. She [the independent translator] had no technical writing skills, and since she used a translation memory, she followed French formatting. At [name of current employer], I write directly in English and I only work with French writers.

Personally, I stopped on the second page [of the survey] when I saw that there were open questions. She [the researcher] should have begun with demographic and contextual data because these questions do not require particular reflection and they put users at ease. Once they got started with the study [if designed with the demographic questions at the beginning], they would be less likely to give up.

I think her [the researcher's] questionnaire is meant for people who have worked at international companies both in France and the United States as technical writers and I think that there are unfortunately not many people in this situation.

The feedback provided by this particular technical writer represents just one person's opinion on the perceived design flaws of my survey. However, this technical writer raises some points that merit further consideration, especially for American technical communication researchers and practitioners who would like to conduct qualitative research with French participants.

Unfortunately, I was limited in how I could present the description of my study because I had to conform to the requirements of the University of Central Florida's Institutional Review Board. Researchers who have more flexibility with the language and content of their study description, however, may wish to take a more creative and persuasive approach. The technical writer's suggestion to start the survey by asking for demographic information before asking the open-ended questions surprised me. I thought it would be impolite to begin the survey by asking questions about personal matters such as age and income, and thought that the open-ended questions were actually less invasive. It seems this strategy, at least in my case, had the opposite effect. Interestingly, the French surveys that I reviewed before designing my own survey also included the demographic questions at the end.

For future surveys to French technical communicators, I would recommend that researchers experiment with the chronology of questions, starting first with the demographic questions. I would also recommend that researchers keep their surveys short. In his open letter to STC France Chapter members, Mr. Gallon marketed his Membership Surveys as "short (no more than 10 questions) and focused on single sets of issues." Having a shorter, more focused survey may generate a greater response rate from French technical communicators. Reducing the number of open-ended questions would likely be desirable to French technical communicators as well.

Because qualitative research, by its very nature, requires the use of open-ended questions, conducting interviews may be a more successful method for asking in-depth questions of French technical communicators. However, the logistics of this approach could prove challenging for U.S.-based researchers, and interviews would likely require an even greater time commitment from participants than would a questionnaire with an average time commitment of twenty minutes. More research is needed to determine the best qualitative method for conducting research with French technical communicators. One final issue of consideration that may have contributed to a low response rate to my survey is respondents' reported lack of interaction between French and American technical communicators. Research published in 2011 by Dressen-Hammouda suggested that American and French technical communicators would be collaborating more frequently as the demand for technical communicators increased in France (172). However, it may be too soon to expect more frequent collaboration among American and French technical communicators, as the profession of technical communication is still developing in France.

CHAPTER FIVE: CONCLUSION AND SUGGESTIONS FOR FUTURE PRACTICE AND RESEARCH

Technical communicators working in the global age are faced with an even bigger set of challenges than those that faced their predecessors. Operating in the international context of today's borderless world requires technical communicators to understand and be sensitive to the needs of colleagues and end users from a variety of cultures. There is, however, no universally-accepted and comprehensive manual for navigating the often choppy waters of international technical communication. Technical communicators are often required to develop this core competency through trial and error.

This thesis represents a step in the effort to better arm American technical communicators with strategies for successful collaboration with their French counterparts and strategies for effectively reaching and engaging French readers of technical documentation. The final chapter of this thesis begins by providing a brief review of the purpose, methodology, and findings of this study. This chapter concludes by providing suggestions for future practice and research in intercultural technical communication.

Summary of Study

This thesis was written in response to the lack of information available to American technical communicators looking for guidance on how to develop content for French audiences and how best to collaborate with French technical communicators on international projects. This lack of information is compounded by the great amount of debate surrounding models, theories, and approaches for effective intercultural technical communication. While the work of Hall and

Hofstede is referenced in most intercultural technical communication studies, scholars remain divided on the merits of this research. Technical communication scholars who see the value of the intercultural communication theories devised by Hall and Hofstede, argue that these theories can serve as useful models for understanding cultural differences and similarities that technical communicators may encounter in their work. Other scholars challenge these theories because they believe Hall and Hofstede's research to be outdated, limited in scope, or lacking in empirical validity.

In an effort to gain clarity on the best models, theories, and approaches for intercultural technical communication and collaboration, I conducted a qualitative online survey of French technical communicators. Survey respondents described a broad range of experiences with American colleagues, ranging from positive and negative experiences, to having no experience working with American colleagues. Survey respondents also described the biggest intercultural challenges facing technical communicators in France. These challenges ranged from the process of localizing documentation and adapting to the "other," to the expense of high-quality translation and localization services.

The survey responses were analyzed using inductive thematic analysis. Two main themes were developed from this analysis. The first theme relates to the importance of adapting content to French audiences. This theme suggests that the French technical communicators surveyed believe that localization and translation are an important part of the documentation process. This theme also suggests that attempts to standardize or globalize documentation, while perhaps more cost-effective, will generally not be as well-received by French audiences as fully-localized documentation. The second theme relates to the perceived cultural differences between French

and American information needs and communication styles. This theme suggests that the French technical communication practitioners surveyed have very specific ideas about the amount of information that should be provided to a French audience, and that they believe that providing too much information can have negative consequences on the reception and adoption of the documentation.

Because of the low response rate that I received for my survey, I investigated problems that may have led to a lack of participation. These problems include a potential lack of interest on the part of French technical communicators in strengthening intercultural ties with their American counterparts, lack of experience working with American technical communicators, and a survey design that did not appeal to French technical communicators. A few survey respondents, and other technical communicators who attempted the survey, reported that they did not understand certain survey questions, felt that some questions were too general or too difficult to answer, or that the survey was much too long.

In response to the limited participation that I received for my survey, I developed a set of recommendations for technical communicators and scholars who wish to conduct similar qualitative research with French participants. These recommendations, provided in Chapter Four, include writing an engaging (less academic and more informal) description of the study; experimenting with the chronology of questions by leading with demographic questions; keeping surveys short (fewer than ten questions) and focused on a single issue; and limiting the number of open-ended survey questions.

As the title of this thesis suggests, several lessons were learned from the French technical communicators who participated in this study, and from those who elected not to participate. The

final intent of this thesis is to synthesize these lessons—providing guidance to American technical communicators who want to better understand French audiences and technical communication in France, whether as colleagues on a global project team, creators of technical documentation, or as intercultural communication scholars. Therefore, this thesis will conclude with suggestions for practice, followed by areas for further research.

Suggestions for Practice

As I argued in Chapter Two, technical communicators can further strengthen the efficiency and effectiveness of their intercultural communications by performing a thorough international-user analysis. This analysis involves not only looking at culture in terms of high and low context, and Individualism versus Collectivism, but also examining the political, economic, social, religious, educational, linguistic, and technological differences and similarities between cultures. Adding to the suggestions recommended by the intercultural communication scholars discussed in the literature review, are the lessons I learned from the French technical communicators who participated in my survey. Based on the feedback provided by these French technical communicators, I offer the following guidance to American technical communication practitioners who are working on intercultural technical communication projects with French colleagues:

Show Respect by Learning French

One of my survey respondents commented that Americans speak English to everyone in the world and expect everyone else to adapt to their language. American technical

communicators who know even a little French will have a big advantage over those who have no command of the language. French technical communicators will be more amenable to collaborating if American technical communicators demonstrate respect for the French language and a willingness to accommodate French technical communicators' needs. French language skills will also come in handy during the translation and localization process that is necessary for creating effective technical documentation for French audiences.

Treat French Colleagues as Equals

One of my survey respondents reported that she did not feel like she was part of the team when working with her American colleagues. American technical communicators who treat French team members as equals, rather than the “other,” are more likely to experience successful intercultural relationships. French technical communicators can make valuable contributions to the process of localizing documentation. Seeking guidance from French technical communicators at the start of a project, and continuing to collaborate actively throughout its duration, will help American technical communicators build more solid relationships with their French counterparts, and create better quality content for French audiences.

Use Tried-and-True Intercultural Communication Strategies, but Remain Flexible

One of my survey respondents reported that American technical communicators have a tendency to over-explain things. This tendency is common among members of the low-context

American culture, and is often considered irritating or insulting to members of the high-context French culture. To bridge the gap that can exist between low- and high-context cultures, American technical communicators should first try to communicate with French colleagues using strategies that are recommended for high-context cultures. These strategies include using less-explicit forms of communicating. However, it is important to remain flexible and willing to adapt communications according to the feedback received from members of the target culture or from localization experts. American technical communicators should be mindful that each communication situation is unique and may require more or less context based on the relationship between the technical communicator and his or her team members or audience.

In Chapter Two, I discussed a list of behaviors that Dressen-Hammouda considers critical to successful interaction in France's intercultural business environment. These suggested behaviors overlap with the recommendations made by my survey respondents. This overlap is most clearly evidenced in the following recommendations:

- Learn to speak basic French, and, when possible, conduct interviews and investigations in French.
- Develop awareness of localization needs. This awareness includes understanding the needs of French customers; ensuring implementation of ISO standards; knowing about legal issues in France; and understanding problems that can arise with translation.
- Respect cultural differences, especially in regard to differences in the concept of time and the extra amount of time it can take in France to perform a task that requires the feedback of several people (172-3).

With regard to creating technical documentation destined for French audiences, American technical communicators should keep in mind that all information must be translated into French. Due to the reported French preference for adapting communications to the needs of the local culture, American technical communicators should localize documentation for French users. These localization efforts should take the needs of a high-context, Individualist culture into account. Generally speaking, less-explicit communications that focus on the direct benefit of the product or service to the individual end user will be appreciated. American technical communicators should also strive to understand the political, economic, social, religious, educational, linguistic, and technological variables of the French culture. A professional translation or localization agency, or members of the target audience, can assist with this process.

Suggestions for Future Research

Technical communication is an emerging profession and academic discipline in France and research on the subject remains in its infancy. This thesis contributes to the limited body of research on technical communication in France and paves the way for future studies in the field. However, much remains to be explored. This thesis reported on the beliefs, experiences, and practices of a small group of technical communicators in France. A call for survey participants was sent to technical communicators who were associated with the French Chapter of the Society for Technical Communication. Extending this survey to the members of the Conseil des Rédacteurs Techniques and tekomp France would broaden the scope of this research and provide additional insight into technical communication in France.

Also, nearly all of the feedback provided by survey respondents was related to the textual aspects of technical communication. Future researchers may wish to emphasize the visual aspects of technical communication, and focus on recruiting survey respondents who make decisions regarding design. Given the profession's roots in translation, greater insight may also be obtained by targeting French technical translators in addition to French technical communicators. Because the respondents in this study were all female, it would also be useful to study whether the beliefs, experiences, and practices of male French technical communicators differ from those of their female colleagues. Adapting my survey to American technical communicators would provide another perspective on the intercultural interactions between American and French technical communicators.

Further research could also include textual and visual analysis of French technical documentation. Documentation could be analyzed according to the culture-value implications advocated by Hall and Hofstede, and further insights could be gained on effective localization strategies. These documents could also be compared to similar documents designed for American audiences. Researchers may also benefit from a purely immersive experience. Working as an intern in a French technical communication department would provide a layer of depth and perspective that cannot be gained from conducting surveys, as would taking on the role of an observer and reporting on experiences using an ethnographic approach.

Circling back to the original purpose of the study, this thesis provided answers to the research questions raised in the introduction. Techniques to bridge linguistic and cultural gaps between French and American technical communicators have been provided, along with best practices for working on intercultural technical communication projects and creating content that

speaks directly to French users' needs. This thesis has answered questions related to the importance of localization and translation of documentation when attempting to reach and engage French audiences. This thesis also sheds light on appropriate times for using globalized approaches when creating international technical documentation. Above all, this thesis gives a voice to French technical communicators who were previously unrepresented in the literature. More research is certainly needed, and the findings presented in this thesis can serve as a foundation for future studies in intercultural technical communication.

APPENDIX A: SURVEY OF FRENCH TECHNICAL COMMUNICATORS

OPENING PAGE – INFORMED CONSENT

EXPLANATION OF RESEARCH

Title of Project: Intercultural Communication in the Global Age: A Survey of French Technical Communicators

Principal Investigator: Nicole A. Tallman

Faculty Supervisor: Dr. Madelyn Flammia, Department of English

You are being invited to take part in a research study. Whether you take part is up to you.

- The purpose of this research is to learn about **technical communication in France**, and ways that American technical communicators can work more effectively with their French counterparts and create more effective technical documentation for French audiences.
- As a survey participant, you will be asked to **answer a brief online questionnaire**. **The survey will take approximately 20 minutes to complete**. In addition to gathering data about your intercultural communication beliefs and practices, and information, language, and cultural needs, the survey will also gather demographic and background data, including your: current role in the technical communication field, number of years working in the field, age, current industry, educational background, languages spoken, birthplace, nationality, region or city of employment, gender, and annual gross salary. **You do not have to answer any question you do not wish to answer.**
- **Your responses will be confidential**. Although the results of this study may be published, no information that could identify you will be included. **Your name will NOT be used in publication**. All data will be stored in a password-protected electronic format.

You must be **18 years of age or older** to take part in this research study.

Study contact for questions about the study or to report a problem: If you have any questions, concerns, or complaints about this research project, **please contact Nicole Tallman at (305) 812-5504 or by email at ntallman@knights.ucf.edu**. You may also contact her faculty supervisor, Dr. Madelyn Flammia, at (407) 823-5596 or by email at Madelyn.Flammia@ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

Clicking on the "agree" button below indicates that: you have read the above information, you voluntarily agree to participate, and you are at least 18 years of age.

If you do not wish to participate in the survey, please decline participation by clicking on the "disagree" button.

agree

disagree

Body of Research Study

I am at least 18 years of age and completing this survey constitutes my informed consent.

SECTION 1: INTERCULTURAL COMMUNICATION PROJECT EXPERIENCE

1. How many technical communications projects have you worked on for clients based in the United States?

 0-5

 6-10

 11-15

 16-20

 More than 20

2. How would you describe your experience working with American colleagues?

3. What advice would you give to American technical communicators who are working on technical content for French audiences?

4. How important is translation? Are you more likely to read content that is presented in French?

5. What is your definition of localization?

6. What is your definition of globalization?

7. Do you think it is important to localize content for French audiences? Why or why not?

8. How do you go about localizing American source documentation for French audiences? (Please speak to both visual and textual aspects of the process.)

9. What is the biggest challenge facing technical communicators working on intercultural communication projects in France?

10. What cultural considerations are important for Americans to keep in mind when preparing content for French audiences?

11. Which American companies (if any) have done the best job of preparing content for French audiences?

12. Are there times when globalizing content is more effective than localizing the document? If so, when?

SECTION 2: DEMOGRAPHICS AND BACKGROUND INFORMATION

13. What is your current primary role in the technical communication field?

- Technical Writer
- Technical Editor
- Documentation Manager
- Information Developer
- Consultant
- Educator
- Other (Enter your response here)

14. What is your employment level?

- Entry Level
- Mid Level, Non-Supervisory
- Mid Level, Supervisory
- Senior Level, Non-Supervisory
- Senior Level, Supervisory

15. How long have you been working in the technical communication field? (Round your answer up to the highest choice if you fall between two possible responses.)

- 1-5 Years
- 6-10 Years
- 11-20 Years
- More than 20 years

16. What is your age?

- 20-29
- 30-39
- 40-49
- 50 or over

17. What industry do you work in?

- Computer Software
- Telecommunications
- Finance
- Education
- Other (Please specify)

18. What is your educational background?

- High School Diploma

- Some College
- Associate Degree/DEUG (high school + 2-3 years)
- Bachelor's Degree (high school + 4-5 years)
- Master's Degree (high school + 6-8 years)
- Doctorate Degree, Ph.D.(high school + 9 or more years)
- Other (please specify)

19. What languages do you speak?

20. How fluent are you in English?

- Elementary Proficiency
- Limited Working Proficiency
- Professional Working Proficiency
- Full Professional Proficiency
- Native or Bilingual Proficiency

21. In what region or city were you born?

22. What is your nationality?

- French by birth
- I became a French citizen (for example, by naturalization, by voluntary oath when you came of age). (Please list your nationality at birth)
- Foreign (Please list your nationality)

23. In what region or city do you work in?

24. What is your gender?

- Female
- Male

25. What is your annual gross salary (before deduction of tax and social security contributions)?

- Less than 25,000 euros
- 25,000-34,999 euros
- 35,000-44,999 euros
- 45,000-54,999 euros
- 55,000-64,999 euros
- 65,000-74,999 euros
- 75,000-84,999 euros
- 85,000-94,999 euros
- 95,000-104,999 euros
- More than 105,000 euros

SECTION 3: THANK YOU AND CLOSING

Thank for you completing the questionnaire. If you would be open to a 30-60 minute Skype conversation to discuss your responses in more detail, please provide your email address or phone number (Enter your contact information here).

APPENDIX B: IRB APPROVAL LETTER



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1
FWA00000351, IRB00001138**

To: **Nicole A. Tallman**

Date: **February 14, 2013**

Dear Researcher:

On 2/14/2013, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: Intercultural Communication in the Global Age: A Survey of
French Technical Communicators
Investigator: Nicole A Tallman
IRB Number: SBE-13-09050
Funding Agency:
Grant Title:
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Patria Davis on 02/14/2013 03:13:33 PM EST

IRB Coordinator

APPENDIX C: PERMISSION TO REPRINT

Nicole Tallman
690 SW 1st Court, PH11-10
Miami, FL 33130

April 10, 2013

Nancy Hoft
8813 Somerset Boulevard
Fort Myers, FL 33919

Dear Ms. Hoft:

This letter will confirm our recent email exchange. I am completing a master's thesis at the University of Central Florida titled "Intercultural Communication in the Global Age: Lessons Learned from French Technical Communicators." I would like your permission to reprint in my thesis a figure from the following book:

Hoft, Nancy L. *International Technical Communication: How to Export Information about High Technology*. New York: John Wiley, 1995.

The figure to be reproduced is located on page 80 of this book and is titled, "Figure 4.3: Hall's Context Square and Victor's diagram of the context ranking of cultures (author's interpretation)."

The requested permission extends to any future revisions and editions of my thesis, including non-exclusive world rights in all languages. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you. Your signing of this letter will also confirm that you own the copyright to the above-described material.

If these arrangements meet your approval, please sign this letter where indicated below and return it to me via email at ntallman@knights.ucf.edu. Thank you for your attention in this matter.

Sincerely,



Nicole Tallman

PERMISSION GRANTED FOR THE USE REQUESTED ABOVE:

By:  _____
Nancy Hoft

Date: 11 April 2013

REFERENCES

- Anderson, Paul V. *Technical Communication: A Reader-Centered Approach*. 7th ed. Boston: Wadsworth, 2010. Print.
- Barnum, Carol M., and Huilin Li. "Chinese and American Technical Communication: A Cross-Cultural Comparison of Differences." *Technical Communication* 53.2 (2006): 143-66. EBSCO. Web. 17 Nov. 2011.
- Bellamy, Patty-Jo. *Cross-Cultural Differences in Preferences for Visual Information in Technical Documentation*. Diss. University of Manitoba, 2006. ProQuest. Web. 11 Oct. 2011.
- Boyatzis, Richard E. *Transforming Qualitative Information: Thematic Analysis and Code Development*. Thousand Oaks: SAGE Publications, Inc., 1998. Print.
- Braun, Virginia, and Victoria Clarke. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3.2 (2006): 77-101. Taylor & Francis Current Content Access. Web. 3 April 2013.
- Brownson, Linda Lash. *The Cultural Obstacles to Globalization: The Franco-American Case*. Diss. Boston University, 2005. ProQuest. Web. 11 Oct. 2011.
- Cardon, Peter W. "A Critique of Hall's Contexting Model: A Meta-Analysis of Literature on Intercultural Business and Technical Communication." *Journal of Business and Technical Communication* 22.4 (2008): 399-428. SAGE Premier. Web. 21 Feb. 2013.
- Carroll, Raymonde. *Cultural Misunderstandings: The French-American Experience*. Trans. Carol Volk. 1st ed. Chicago: University of Chicago Press, 1990. Print.

- Creswell, John W. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 3rd ed. Thousand Oaks: SAGE Publications, Inc., 2009. Print.
- Culshaw, Stuart. "Stories of Technical Communicators - Call for Contributors." *STC France Website*. Society for Technical Communication France. 30 May 2010. Web. 12 May 2013.
- Davy, Debbie, and Christina Valecillos. "Qualitative Research in Technical Communication: A Review of Articles Published from 2003 to 2007." *Qualitative Research in Technical Communication*. Eds. James Conklin and George F. Hayhoe. New York: Routledge, 2011. 347-75. Print.
- Ding, Daniel D. "The Emergence of Technical Communication in China—Yi Jing (I Ching): The Budding of a Tradition." *Journal of Business and Technical Communication* 17.3 (2003): 319–45. *SAGE Premier*. Web. 21 Feb. 2013.
- Ding, Huiling, and Gerald Savage, eds. *New Directions in Intercultural Professional Communication*. Special Issue of *Technical Communication Quarterly* 22.1 (2013): 1-102. *Taylor & Francis Current Content Access*. Web. 18 Feb. 2013.
- Dressen-Hammouda, Dacia. "Teaching Technical Communication in France: Challenges and Prospects." *Teaching Intercultural Rhetoric and Technical Communication: Theories, Curriculum, Pedagogies, and Practice*. Eds. Barry Thatcher and Kirk St. Amant. Amityville: Baywood Publishing Company, Inc. 2011. 159-175. Print.
- Dunne, Keiran J., and Elena S. Dunne. "From Vicious to Virtuous Cycle: Customer-Focused Translation Quality Management Using ISO 9001 Principles and Agile Methodologies." *Translation and Localization Project Management*, Eds. Keiran J. Dunne and Elena S.

- Dunne. Amsterdam: John Benjamins Publishing Company, 2011. 153-88. Print.
- Flacke, Marie-Louise. “‘Comprendre la documentation technique’, le manuel.” *STC France LinkedIn Group*. Society for Technical Communication France. Dec. 2012. Web. 28 Feb. 2013.
- . “Technical Communication in France.” *Technical Communication - International: Today and in the Future*. Eds. Jörg Hennig and Marita Tjarks-Sobhani. Lübeck: Schmidt-Römhild, 2005. 36-50. Print.
- . “The Hidden Costs of Cross-Cultural Documentation.” *Connecting People with Technology: Issues in Professional Communication*. Eds. George F. Hayhoe and Helen M. Grady. Amityville: Baywood Publishing Company, Inc., 2009. 69-78. Print.
- Gallon, Ray. “Time for Change: Reinventing STC France.” *STC France Website*. Society for Technical Communication France. 19 Sep. 2010. Web. 12 May 2013.
- Ganier, Franck. *Comprendre la Documentation Technique*. 1st ed. Paris: Presses Universitaires de France, 2013. Print.
- Guest, Greg, Kathleen M. MacQueen, and Emily E. Namey. *Applied Thematic Analysis*. Thousand Oaks: SAGE Publications, Inc., 2012. Print.
- Hager, Peter J. “Global Graphics: Effectively Managing Visual Rhetoric for International Audiences.” *Managing Global Communication in Science and Technology*. Eds. Peter J. Hager and H.J. Scheiber. New York: John Wiley & Sons, Inc., 2000. 21-43. Print.
- Hall, Edward T. *Beyond Culture*. Garden City: Anchor Press, 1976. Print.
- . *The Dance of Life: The Other Dimension of Time*. Garden City: Anchor Press, 1983. Print.

- Hall, Edward T., and Mildred Reed Hall. *Understanding Cultural Differences*. Yarmouth: Intercultural Press, 1989. Print.
- Hall, Marinda, Menno de Jong, and Michaël Steehouder. "Cultural Differences and Usability Evaluation: Individualistic and Collectivistic Participants Compared." *Technical Communication* 51.4 (2004): 489-503. EBSCO. Web. 18 Nov. 2011.
- Hamilton, Daniel S., and Joseph P. Quinlan. *France and Globalization*. Washington, D.C.: Center for Transatlantic Relations, 2008. Print.
- Hofstede, Geert. *Culture's Consequences: International Differences in Work-Related Values*. Abr. ed. Newbury Park: SAGE Publications, Inc., 1982. Print. Cross-Cultural Research and Methodology Ser. 5.
- . "Recent Discoveries about Cultural Differences." Keynote Speech for the 2nd Hofstede Symposium. Groningen, 17 Jan. 2013. Video produced by Siegmund Audiovisuele Produkties for Geert Hofstede Consortium. Web. 18 Feb. 2013.
- Hofstede, Geert, Gert Jan Hofstede, and Michael Minkov. *Cultures and Organizations: Software of the Mind: Intercultural Cooperation and Importance for Survival*. New York: McGraw-Hill, 2010. Print.
- Hoft, Nancy L. *International Technical Communication: How to Export Information about High Technology*. New York: John Wiley, 1995. Print.
- Houp, Kenneth W., et al. *Reporting Technical Information*. 11th ed. New York: Oxford University Press USA, 2005. Print.
- Hunsinger, R. Peter. "Culture and Cultural Identity in Intercultural Technical Communication." *Technical Communication Quarterly* 15.1 (2006): 31-48. EBSCO. Web. 9 Oct. 2011.

- Johnson-Sheehan, Richard. *Technical Communication Today*. 4th ed. New York: Longman, 2012. Print.
- José, Laurence. *Technical Communication in the Global Context: A Heuristic Approach to Disciplinary Identity and Pedagogical Practices*. Diss. Michigan Technological University. 2010. *ProQuest*. Web. 8 Oct. 2012.
- Kimball, Miles A., and Ann R. Hawkins. *Document Design: A Guide for Technical Communicators*. 1st ed. Boston: Bedford/St. Martin's, 2007. Print.
- Lannon, John, M., and Laura J. Gurak. *Technical Communication*. 12th ed. New York: Longman, 2010. Print.
- Lee, Wei-Na, and Sejung Marina Choi. "Classifying Web Users: A Cultural-Value Based Approach." *Linguistic and Cultural Online Communication Issues in the Global Age*. Ed. Kirk St. Amant. Hersey: Information Science Reference, 2007. 45-62. Print.
- Lewis, Richard D. *When Cultures Collide: Leading Across Cultures*. 3rd ed. Boston: Nicholas Brealey International, 2006. Print.
- Markel, Mike. *Technical Communication*. 9th ed. Boston: Bedford/St. Martin's, 2009. Print.
- Matveeva, Natalia. "Teaching Intercultural Communication in a Basic Technical Writing Course: A Survey of Our Current Practices and Methods." *Journal of Technical Writing and Communication* 38.4 (2008): 387-410. *Academic Search Premier*. Web. 24 Feb. 2013.
- Miller, John J., and Mark Molesky. *Our Oldest Enemy: A History of America's Disastrous Relationship with France*. 1st ed. New York: Doubleday, 2004. Print.
- Minacori, Patricia, and Lucy Veisblat. "Translation and Technical Communication: Chicken or Egg?" *Meta journal des traducteurs/Meta: Translators' Journal* 55.4 (2010): 752-68.

- Érudit*. Web. 16 January 2013.
- Nadeau, Jean-Benoit, and Julie Barlow. *Sixty Million Frenchmen Can't Be Wrong: Why We Love France but Not the French*. 1st ed. Naperville: Sourcebooks, 2003. Print.
- Nunamaker Jr., Jay F., Bruce A. Reinig, and Robert O. Briggs. "Principles for Effective Virtual Teamwork." *Communications of the ACM* 52.4 (2009): 113-17. *Academic Search Premier*. Web. 9 Mar. 2012.
- Platt, Polly. *French or Foe?: Getting the Most Out of Visiting, Living and Working in France*. 3rd ed. London: Culture Crossings, Ltd., 2003. Print.
- Portewig, Tiffany Craft. "The Role of Rhetorical Invention for Visuals." *Qualitative Research in Technical Communication*. Eds. James Conklin and George F. Hayhoe. New York: Routledge, 2011. 145-62. Print.
- Roach, K. David, Myrna M. Cornett-DeVito, and Raffaele DeVito. "A Cross-Cultural Comparison of Instructor-Communication in American and French Classrooms." *Communication Quarterly* 53.1 (2005): 87-107. *EBSCO*. Web. 10 Oct. 2009.
- Scott, J. Blake, and Bernadette Longo, eds. *Cultural Studies and Technical Communication*. Special Issue of *Technical Communication Quarterly* 15.1 (2006): 1-110. *Taylor & Francis Current Content Access*. Web. 7. Oct. 2012.
- Scott, Jennifer Bracken. "Intercultural Rhetoric in the Technical Communication Curriculum: A Review of the Literature." *Journal of Rhetoric, Professional Communication and Global Inquiry* 1.1 (2010): 77-90. Web. 8 Oct. 2012.
- Society for Technical Communication France Chapter Website. 2010. Web. 24 Sept. 2012. <<http://stcfrance.org>>.

- St. Amant, Kirk. "Online Ethos and Intercultural Technical Communication: How to Create Credible Messages for International Online Audiences." *Technical Communication and the World Wide Web*. Eds. Carol Lipson and Michael Day. Mahwah: Lawrence Erlbaum Associates, Inc., 2005. 133-65. Print.
- . "Thinking Globally, Teaching Locally: Understanding the Changing Nature of Technical Communication in an Age of Globalization." *Teaching Intercultural Rhetoric and Technical Communication: Theories, Curriculum, Pedagogies, and Practice*. Eds. Barry Thatcher and Kirk St. Amant. Amityville: Baywood Publishing Company, Inc. 2011. 1-11. Print.
- Starke-Meyerring, Doreen, ed. *Globally Networked Learning Environments in Professional Communication*. Special Issue of the *Journal of Business and Technical Communication* 24.3 (2010): 259-397. *SAGE Premier*. Web.
- Sullivan, Patricia, and Rachel Spilka. "Qualitative Research in Technical Communication: Issues of Value, Identity, and Use." *Qualitative Research in Technical Communication*. Eds. James Conklin and George F. Hayhoe. New York: Routledge, 2011. 1-24. Print. 7 Oct. 2012.
- Thatcher, Barry, et al. "Web Site Analysis across Cultures: An Inquiry into InterCultural Values and Web Site Design." *Linguistic and Cultural Online Communication Issues in the Global Age*. Ed. Kirk St. Amant. Hersey: Information Science Reference, 2007. 124-42. Print.
- Ting-Toomey, Stella. "Rhetorical Sensitivity Style in Three Cultures: France, Japan, and the United States." *Central States Speech Journal* 39.1 (1988): 28-36. Print.

- Ulijin, Jan M. "Translating the Culture of Technical Documents: Some Experimental Evidence." *International Dimensions of Technical Communication*. Ed. Deborah C. Andrews. Arlington: Society for Technical Communication, 1996. 69-86. Print.
- Ulijin, Jan M., and Kirk St. Amant. "Mutual Intercultural Perception: How Does It Affect Technical Communication? Some Data from China, the Netherlands, Germany, France, and Italy." *Technical Communication* 47.2 (2000): 220-38. *EBSCO*. Web. 2 Oct. 2009.
- Wang, Quiye. "A Cross-Cultural Comparison of the Use of Graphics in Scientific and Technical Communication." *Technical Communication* 47.4 (2000): 553-60. *EBSCO*. Web. 9 Oct. 2011.
- Wang, Yiqin, and Dan Wang. "Cultural Contexts in Technical Communication: A Study of Chinese and German Automobile Literature." *Technical Communication* 56.1 (2009): 39-50. *EBSCO*. Web. 2 Oct. 2011.
- Würtz, Elizabeth. "Intercultural Communication on Web Sites: A Cross-Cultural Analysis of Web Sites from High-Context Cultures and Low-Context Cultures." *Journal of Computer-Mediated Communication* 11.1 (2006): 274-99. *Wiley Online*. Web. 8 Oct. 2012.
- Yu, Han. "Putting China's Technical Communication into Historical Context: A Look at the Chinese Culinary Instruction Genre." *Technical Communication* 56.2 (2009): 99-110. *EBSCO*. Web. 2 Oct. 2011.
- Yu, Han, and Gerald Savage. *Negotiating Cultural Encounters: Narrating Intercultural Engineering and Technical Communication*. 1st ed. Hoboken: Wiley-IEEE Press, 2013. Print. IEEE PCS Professional Engineering Communication Series.

Zemliansky, Pavel, and Constance Kampf, eds. *Professional Communication in Global Contexts*.

Special Issue of *IEEE Transactions on Professional Communication* 54.3 (2011): 221-

340. *IEEE Xplore*. Web. 7 Oct. 2012.