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DESIGNING FOR MULTICULTURAL AND INTERNATIONAL AUDIENCES: CREATING CULTURALLY-INTELLIGENT VISUAL RHETORIC AND OVERCOMING ETHNOCENTRISM

by

BRIDGET ROSE MOORE B.A. English Iowa State University 2002

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

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ABSTRACT

Various cultures interpret visual rhetoric differently; therefore, technical communicators must adjust their rhetoric accordingly by creating effective visual rhetoric for their international and multicultural audiences. Although there is a great deal of research in the field regarding how to create effective visual rhetorical rhetoric, this research often fails to take into international and multicultural audiences into consideration.

Many visual rhetoric solutions proposed in technical communication involve "catch all" approaches that do little to communicate to people of non-Western cultures and can even serve to offend or confuse international and multicultural audiences. These solutions are generated by a globalization mindset, but are not realistic when we acknowledge how varied technical communication audiences are with regard to culture. The globalization approach also fails unless technical communicators intend to limit the reach of their communication to certain types of Western audiences.

To create the most useful visual rhetoric, technical communicators must learn to use color, graphics, icons/symbols, and layouts (web and print) appropriately for audiences. They must learn more about different types of cultures (individualistic or collectivistic, universalist or particularist, high-context or low-context, high uncertainty avoidance or low uncertainty avoidance, monochronic or polychronic, linear thinking or systemic thinking, masculine or feminine), and they must address these different cultural expectations accordingly.

For my husband and best friend, Rafael. Thank you for accompanying me on this journey. I look forward to traveling with you on many more journeys to come				

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Thanks to all the technical communicators whose research helped to enrich this thesis; your work is greatly appreciated.

And thank you to my parents, Roseann Walker and Harry J. Moore, for their continued support and love—the world has always been a better place because of them.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION	1
Background and Purpose	4
Scope	5
Significance	6
Methodology	8
Organization of this Study	9
CHAPTER TWO: GLOBALIZATION VERSUS LOCALIZATION	11
Audiences' Needs and Obstacles to Addressing these Needs	11
Another Option: Collaboration	16
CHAPTER THREE: CULTURAL CONSIDERATIONS	20
Individualistic or Collectivistic, Universalist or Particularist	20
High Context or Low Context	24
High Uncertainty Avoidance or Low Uncertainty Avoidance	25
Monochronic or Polychronic	26
Cultural Ways of Thinking and Learning	28
Reconciling Different Standards of Culture	30
Masculine or Feminine	34
CHAPTER FOUR: CULTURAL INTERPRETATIONS OF COLOR, GRAPHICS, ICONS/SY	MBOLS, AND LAYOUTS36
Designing with Color	36
Designing Graphics	42
Designing with Icons and Symbols	47
Web and Print Layout Design	52
Presentation Design	57
CHAPTER FIVE: CONCLUSION	59

Key Findings	60
Recommendations	60
Opportunities for Further Research	61
LIST OF REFERENCES	62

LIST OF TABLES

Table 1 Overview of the Two Approaches	18
Table 2 Characteristics and Values of Individualistic, Collectivistic, Universalist, and Particularist, Cultures	23
Table 3 Color-to-Culture Map Revisited, Further Expanded Part 1	
Table 4 Color-to-Culture Map Revisited, Further Expanded Part 2	40
Table 5 Sensitive Areas for Depicting People	44
Table 6 Japanese Emoticons	51

CHAPTER ONE: INTRODUCTION

How do technical communicators best address multicultural and international audiences concerning visual rhetoric in technical communication? In current scholarship, there are three basic schools of thought regarding addressing multicultural and international audiences: globalization, localization, and a "happy medium" born of collaboration. Technical communicators—whether scholars, practitioners, or both—must learn to address international and multicultural audiences because we are communicating within a global context that will continue to expand and connect groups and cultures.

Addressing international and multicultural audiences is further complicated by the fact that interpretation of visual rhetoric varies from culture to culture because the cultures, themselves, vary from one another in deep-rooted ways. Cultures may be individualistic or collectivistic, universalist or particularist, high-context or low-context, high uncertainty avoidance or low uncertainty avoidance, monochronic or polychronic, linear thinking or systemic thinking, masculine or feminine. And within each culture, males and females tend to interpret visual rhetoric differently from one another.

Technical communicators address multicultural and international audiences through print, online, and multimedia. There is no question as to whether or not our audiences vary in culture. The question is, "How do we best address the issue of multicultural and international audiences when creating technical communication?"

The answer to this question lies in the discovery of how these international and multicultural audiences interpret visual rhetoric. Technical communicators can alleviate our audiences' frustrations by acknowledging and addressing audiences as multicultural and international, rather than attempting to address them as a homogenized whole and by

understanding how each culture views specific elements of visual rhetoric: colors, graphics, icons/symbols, and layouts (web/print).

To communicate information effectively, technical communicators must shape rhetoric that is not offensive to any portion of the audience. Technical communicators must also learn to shape rhetoric that is appealing to audiences of multiple cultures—rather than relying on using the visual rhetoric theory and design techniques that are most familiar to them and that have been touted as "good, basic design practices." We must go beyond learning "universal" design theory—so often used (and sometimes misused) in the West by technical communicators—and learn the intricacies of the pathos and ethos evoked by colors for people of various cultures. Tailoring visual rhetoric for a particular culture is important for making the communication the most effective and practical for the users, readers, and learners as well.

To tailor visual rhetoric effectively to a particular culture, we have obstacles to overcome within ourselves. Dan Voss and Madelyn Flammia suggest that "As we study other cultures, we face the challenge of avoiding ethnocentric thinking. On the one hand, we need to learn specific facts about other cultures' values, beliefs, and traditions. On the other hand, we need to avoid viewing other cultures as merely a collection of superficial differences from our own culture—the epitome of ethnocentrism" (72). This means we must work to educate ourselves about cultures unfamiliar to us and maintain a respectful view of the people of these cultures without oversimplifying them.

One way in which we may be able to start looking at how we create communication for cultures that are unfamiliar to us may be to use the same ethical guidelines we would for any communication we create for the culture(s) with which we are familiar. Deborah C. Andrews offers these guidelines for writing ethically: "1) Treat your audience with respect and civility. 2)

Be honest. 3) Take responsibility for team endeavors. 4) Carry your ethical values abroad. 5) Adhere to any codes of ethics that apply to your organization or your profession. 6) Use inclusive language" (Andrews qtd. in Voss and Flammia 74). The fourth guideline can apply to cultures abroad as well as the multicultural audiences whom we address while right here in the United States. These other tenets can also aid us in remaining respectful and treating all audiences with the same level of understanding.

Lori Allen and Dan Voss also put great importance on cultural sensitivity when creating technical communication:

In technical communication, the value of cultural sensitivity demands tolerance, understanding, and freedom from prejudice. It means embracing diversity, respecting rather than fearing differences, and reflecting that respect not only in our products but in our personal and professional behavior as well. To do so represents more than a professional value, it is a commitment to defend our birthright as human beings. (Allen and Voss qtd in Voss and Flammia 79)

Because so many people are often well-immersed in their "own" cultures for a long time, it can be difficult to learn about other cultures without resorting to stereotyping, tokenism, or ethnocentrism. Stereotyping has been defined as, "cognitive representations of another group that influence our feelings toward members of that group" (William Gudykunst and Young Yun Kim qtd. in Voss and Flammia 80). Additionally, tokenism is akin to stereotyping because "both are the result of prejudging and often negative beliefs about other groups" (Voss and Flammia 80). but tokenism is harder to pinpoint because it is less obvious. Tokenism is "the attempt to appear unprejudiced by striving for the appearance of equal treatment for all without changing underlying beliefs or conditions that reflect existing prejudices" (Voss and Flammia 80). Voss

and Flammia assert that it is "ethnocentric thinking—the belief in the superiority of one's own culture—that underlies both stereotyping and tokenism" (80). It appears the key to avoiding stereotyping and tokenism when addressing other cultures is to let go of ethnocentric thinking. Sometimes this is easier said than done because "ethnocentric beliefs frequently operate at an unconscious level and can often masquerade as the perception of *the way things are* rather than as blatant prejudice" (Voss and Flammia 80). As technical communicators, we need to remain vigilant about categorizing cultures and take pains to avoid making broad generalizations or being so self-conscious that we patronizingly cater to people of a culture. Achieving a respectful balance in how we address cultures is important for creating effective technical communication for multicultural and international audiences.

Background and Purpose

My research into international visual rhetoric interpretation and practices and the resulting thesis is an effort to discover and share how visual rhetoric needs differ from culture to culture and how to create more audience-appropriate technical communication for multicultural and international audiences. One of our concerns as technical communicators is not only how to design context- and purpose-appropriate communication, but *audience-appropriate* communication. In order to address and serve the needs of multicultural and international audiences more effectively, we must know what design practices are—or are not—the best choices for various cultures.

My research questions for this thesis are:

- Are the design styles we are learning and using as Western technical communicators appropriate for all audiences (multicultural and international)?
- Do interpretations of visual rhetoric vary from culture to culture and, if so, why?
- How can we adapt new knowledge of multicultural and international needs for visual rhetoric into our collective repertoire in order to be more versatile communicators?

Scope

This thesis contains discussion of cultural attributes as well as different interpretations of particular visual rhetoric elements and design approaches in various cultures. This thesis attempts to answer why, in light of these interpretations and contextual needs, these varied approaches to creating visual rhetoric are important for particular audiences. Visual rhetoric elements discussed are: Colors, graphics, icons/symbols, and layouts.

These elements are discussed concerning how they are interpreted differently from one culture to another and how these different (and sometimes opposing) interpretations create the need for sensitivity and a change in conventional thinking for Western designers of technical communication. My thesis mainly juxtaposes Western design interpretation and approaches with those of Eastern cultures because a significant contrast exists between these cultures in this area. The primary audience for this thesis is the technical communication community, at large. My primary audience's levels of knowledge and background include people with technical communication, design, and intercultural communication backgrounds. My thesis research and discussion includes existing scholarship from articles, books, and credible web sources written by theorists of various fields of study, including technical communication, instructional design, graphic design, art and design, and intercultural communication.

So, can technical communicators avoid learning specifics about visual rhetoric elements as they relate to various cultures by creating general or "global" communication? Is it possible to design communication that appeals to—or is appropriate for—all cultures at once? This does not seem like a realistic possibility. In the face of this unrealistic idea of globalizing design in technical communication, it may be best for technical communicators to spend less time trying to avoid addressing individual cultures by globalizing communication and more time researching and learning about as many cultures as possible in order to create communication that is truly effective on a localized level.

Significance

Technical Communicators need to learn more about what visual rhetoric practices are applied by various international cultures and why these choices are made. In order to achieve this goal, we must understand how and why various cultures interpret colors, graphics, icons/symbols, and layouts in particular ways, as well as how and why contextual needs for visual rhetoric vary from one culture to another. Some visual rhetoric choices are likely to lead to misunderstandings or may be inappropriate or offensive to some audiences, so we must educate ourselves to avoid this. In addition to the work of Voss and Flammia on the importance of taking cultural difference into consideration with regard to technical communication, additional important work has been presented by Nancy Hoft ("Global Issues, Local Concerns"), Voss and Flammia ("Ethical and Intercultural Challenges for Technical Communicators and Managers in a Shrinking Global Marketplace"), Matthew McCool ("Information Architecture: Intercultural Human Factors"), and Carol Barnum and Li Huilin ("Chinese and American Technical Communication: A Cross-Cultural Comparison of Differences"). Many others have also contributed valuable cultural insights, and their work is discussed in this thesis.

The insights revealed in this thesis can assist scholars and professional technical communicators to address multicultural and international audiences more effectively through their technical communication. We know that consideration for audience is paramount, but are we remembering to take into consideration that colors, graphics, icons/symbols, and layouts must be tailored (localized) to suit particular audiences?

Many aspects complicate the issue of addressing multicultural and international audiences because these audiences use different languages, are from different countries, and embody different cultures. Cultures can be very different from one another—individualistic or collectivistic; universalist or particularist; high-context or low-context; high uncertainty avoidance or low uncertainty avoidance; monochronic or polychronic; linear thinking or systemic thinking; masculine or feminine. Technical communicators can alleviate the audience's frustrations by acknowledging and addressing audiences more specifically. To address multicultural and international audiences concerning visual rhetoric, technical communicators must be aware of the different ways visual rhetoric elements are used and interpreted in various cultures. To communicate information effectively, technical communicators must shape rhetoric that is not offensive to any portion of the audience; technical communicators must also learn to shape rhetoric that is appealing to audiences of multiple cultures—rather than just shaping rhetoric in a way that is most familiar to the technical communicator creating the design.

This subject matter is compelling because it is vital for us, as technical communicators, to be able to address multicultural and international audiences in order to best serve their needs. To more effectively address these audiences, we must understand how and why their contextual needs and interpretations of visual rhetoric differ.

So, can technical communicators ignore how design elements are interpreted by various cultures and still create effective visual rhetoric by using "Global" design? Is it possible to design communication that appeals to—and is appropriate for—all cultures at once? This does not seem like a realistic possibility. In the face of this unrealistic idea of globalizing design in technical communication, it may be best for technical communicators to spend less time trying to avoid addressing individual cultures by globalizing communication and more time researching and learning about as many cultures as possible in order to create communication that is truly effective on a localized level.

Methodology

My research includes articles (from periodicals as well as credible online sources), books, and conference papers. The books and articles are from various disciplines, including technical communication, design, and international communication. Incorporated into this thesis are different perspectives from various disciplines in order to create a more comprehensive view of the issues related to creating international technical communication. The articles include both scholarly and more "commercial" articles. The books are mainly from the fields of design and technical communication. Some of the scholarly articles lead to other, related articles because they cited the other articles in the text.

Some non-print sources used for this thesis are legitimate web sources, as well as entries received through the Society for Technical Communication (STC). Some of the web sources were discovered by doing searches using Google Scholar and Dogpile for a known article and clicking the link to view the results showing other, related articles in which the known article is cited. Some sources are papers presented at conference and annual meetings for reputable organizations. When evaluating potential sources, I kept in mind the following points: 1)

Translated sources may not be translated accurately, 2) Sources may not be in U.S.-style English, and 3) The source author(s) may have biases toward or against particular culture(s). The latter is often a result of the authors operating within the parameters of their own cultural conditioning. I took care to analyze sources without responding with "knee-jerk" reactions to the information about and from cultures other than the one(s) with which I am most familiar—resisting the urge to be ethnocentric.

During my research, I realized that it is sometimes difficult to assess sources generated by various cultures or sources that discuss communication of various cultures because if I am not of the culture being discussed, how do I know if what is being stated as fact is, in fact, a common truth? This complexity only spurred on my interest and strengthened my stance that insists we, as technical communicators, must work to increase and expand our cultural knowledge to include as many cultures as are represented by our current and future audiences.

Organization of this Study

These sources used for this thesis provide basis and examples for the information discussed. The thesis discussion includes technical communication approaches to creating visual rhetoric for audiences, as well cultural considerations we must take into account. Chapter One, the Introduction, includes discussion of background, purpose, scope, and significance of this thesis to the field of technical communication. Chapter Two provides the motivating argument of globalization versus localization. Chapter Three is a discussion of culture types (individualistic or collectivistic; universalist or particularist; high-context or low-context; high uncertainty avoidance or low uncertainty avoidance; monochronic or polychronic; linear thinking or systemic thinking; masculine or feminine). Chapter Four contains discussion of elements of visual rhetoric (color, graphics, icons/symbols, and layouts) and how different cultures interpret

these visual rhetoric elements differently. Chapter Five, the Conclusion, the thesis information is synthesized and summarized. Also in this chapter, some additional questions for further research in the field are raised and some suggestions regarding how we can best address multicultural and international audiences are offered.

The next chapter, which discusses the motivating argument of globalization versus localization, also includes the discussion of a third possibility proposed by Hoft—collaboration. This chapter will address whether or not it is possible to rely on this proposed third option and whether or not this option relieves us of making a decision between globalization or localization when creating effective visual rhetoric in technical communication.

CHAPTER TWO: GLOBALIZATION VERSUS LOCALIZATION

Globalization is the practice of creating rhetoric to be used "universally" for many audiences—meant to have universal appeal and usability. However, as technical communicators (audience advocates), we should ask, "When audiences vary so much in culture, and tastes and needs differ so much from culture to culture—how can any communication be universally appealing and understood?" Some large, international corporations, including Xerox as discussed by Ann H. Adams, Gail W. Austin, and Melissa Taylor, make it their goal to create communication that embodies "cultural neutrality, with minimum need for localization" (253). This belief in the possibility of creating culturally neutral communication is worrisome because as one researches more cultural attributes, one discovers how vastly different cultures are from one another in their interpretations of communication and in their communication needs.

Localization, on the other hand, involves creating rhetoric that is specific to each culture the company expects to address. As can be expected, localization requires much more research and understanding of various cultures as well as more time and money invested in the creation of the rhetoric.

This chapter focuses on the options for how to approach creating effective technical communication—using globalization or localization—or whether a third option of collaboration is viable.

Audiences' Needs and Obstacles to Addressing these Needs

It would seem any company would want to localize their technical communication in order to better reach audiences. So we may ask why is it that some companies choose not to localize? In business, the answer to this is tied to the typical "bottom line"—money. Localization usually requires a larger budget, and some companies are not willing—or able—to put out

additional expense for localization of communication. Ironically, it seems as though the largest U.S. companies are the ones who practice globalization, rather than localization—even though they may be the group most able to afford the additional cost for localization.

Localization is much more expensive because it requires much more time, effort, and consideration in order to find that balance of tailoring rhetoric to multicultural and international audiences without stereotyping or tokenizing. Also, creating multiple versions of the same communication requires more labor (paid labor), which results in a much higher budget per project. Even if money is not an issue, there are other considerations that complicate localization.

In "Global Issues, Local Concerns," Hoft offers a warning regarding localization, saying, "[when] differentiating cultures, we find a strong trend toward generalization. Excessive generalization can lead to myth and stereotyping, among other extremes" (145). However, Hoft also warns that globalization is also not the solution because, "Globalization is still a very imperfect strategy. For all its benefits—and there are many—it ignores culture" (147). It is this disregard for culture that makes globalization an unpalatable option to many technical communicators.

Many technical communicators are fully supportive of learning more about our audiences. Erin Heximer and Lisa Wu encourage technical communicators to investigate their audiences because "The more you can learn about your various audiences' needs and expectations, the better chance you have of communicating information that will be interpreted correctly." Though Heximer and Wu focus mostly on addressing multicultural or international audiences through text, they also discuss important aspects of design as related to coordinating text with graphics.

These strategies include using "Graphics that are carefully designed and selected to avoid offense [and] an absence of stereotypes, region-specific metaphors and image innuendoes, and slang" (253), as discussed by Ann H. Adams, Gail W. Austin, and Melissa Taylor, with regard to Xerox's strategies for creating "culturally neutral document[s]" (253). These two strategies are, of course, important considerations. However, in the course of learning what *not* to use when addressing cultures, technical communicators can also learn—and apply—strategies for learning what *to* use to effectively address particular cultures.

Communicators and corporations do not need to feel as though choosing localization means committing to limitless research and attempting to address each culture fully. Localization can encompass "increased cultural adaptations such as color, currency, and time, and may be specific, for example, to Mexico" (Hoft qtd. in McCool 169), but there are varying degrees to which communicators can address the issue of localization. Radical localization "attempts to further adapt to a restricted region or locale, such as the Mexican state of Sonora. Radical localization considers cultural values as well as linguistic and rhetorical adaptations" (Hoft qtd. in McCool 169). Not all communicators and corporations choose to go the "radical localization" route, but any localization is better than none at all.

Any amount of localization can raise the level of effectiveness of the communication, but we must be careful with choosing to address certain elements and not others. For one project a technical communication team:

...developed the content with a domestic audience in mind, and then translated and internationalized the content—adapted for color, currency, and time—but without the structural rearrangement to meet the unique needs of our international audience...this

failure to truly accommodate the needs of our audience was met with an unusually high number of support calls from these customers, in particular Japan. (McCool 178)

So, it would seem that technical communicators may have to go further to make localization effective and there may not be any such thing as going halfway and still having the communication work for the audience—this means that money is not the only major issue related to localization. However, Barnum and Huilin argue, "Localization may mean nothing more than surface-level changes to the treatment of dates and times, or it may mean more substantive changes to the types of examples, graphics, choice of colors, idiomatic expressions, metaphors, and so forth" (145).

This may be why even if money is not an issue; some technical communicators may choose not to create localized ways of addressing multicultural and international audiences and, instead, choose to ignore culture. Maybe this choice against localization is because given all the cultural considerations that must be learned in order to address these audiences effectively and the vast amount of information that must be understood regarding visual rhetoric and cultures, executing successful localization may appear to be an almost impossible task.

When discussing globalization of design, Charles Kostelnick and David D. Roberts mention multinational corporations. Multinational corporations are the organizations most likely to have more funds to put toward creating localized documents and yet they are often the quickest to choose to ignore culture and create global design instead. There are some exceptions to this, however, as evidenced by Barnum and Huilin:

Some companies are now beginning to recognize that documents intended for international markets need not just translation but localization...some companies have gone a step further to internationalize their documentation by establishing guidelines for

content creation that result in the absence of country- or culture-specific references from the start, thereby eliminating the need for localization efforts. (145)

Steve Chu discusses a scenario in which two web development teams "experience the inevitable tension between universality and cultural specificity" who agreed to "adopt a simple design without cultural details" (211). One can argue that these globalization strategies are not taking the creation of effective communication further, but a very large step back. In the case documented by Chu, the teams chose their strategy because "details might only distract international users, who may bring very different assumptions to an image, increasing the possibility of misinterpretation" (Kostelnick and Roberts qtd. in Chu 211). This type of strategy seems a good one if one is of the mindset that an audience varies culturally to such an extent that it is an impossibility to create multiple versions (or a segmented) of a piece of technical communication. However, with the wealth of expertise, creativity, and technology available to technical communicators, it is difficult to believe there is ever a case in which it is better to create global communication rather than create communication tailored to our audiences. If we remain open-minded to the idea of creating localized communication, then the only real obstacle we may regularly encounter to any degree is the resistance of companies to spare the necessary time and expense to allow us to properly tailor our rhetoric for our international and multicultural audiences. Often, U.S. companies labor under the yoke of the American and capitalist business model that assumes "we" can "sell anybody anything" (Timothy Weiss 24). This assumption and attitude leads us to assume foolishly that we can "sell" a global or "universal" piece of rhetoric to international or multicultural audiences. We should, instead, be "building bridges" (Weiss 24) with various cultures through well-intended communication.

If these companies understand enough to know what cultural references to eliminate in the name of globalization, they should be able to employ the same resources to create localized communication. Are technical communicators condemned to always making a distinct choice between globalization or localization—or does the best solution present itself in the idea of collaboration?

Another Option: Collaboration

Hoft explains collaboration as a third option—in opposition to technical communicators making the choice of either globalization or localization for projects. The process of collaboration can be accomplished by creating multicultural teams made up of individuals who work together—sharing their cultural knowledge—to create technical communication that finds a balance between effectively addressing international and multicultural audiences without facing opposition because of financial concerns. Because of the technologies available to us, the team members do not need to be located in the same place to collaborate with one another. Using these communication and file sharing technologies can save money on projects while still fulfilling the most important objective—collaborating to create rhetoric that reflects enough localization techniques to be effective without having to resort to globalization, which neglects all cultural sensitivities and results in ineffective or offensive communication.

Cultural attributes come into play when working on multicultural and international teams, because some cultures may not assert their ideas as much, per their accepted social behaviors. In a case study described by Melanie Doulton, a global team made up of both U.S. and India team members faced tension in problem-solving when "the team in India had a better solution [but] it did not know how to communicate this to the manager" because they were afraid of offending the U.S. team manager (20). Once the India team did share their solution with the manager, he

was receptive to the idea and but did not understand why the India team had not been more upfront with sharing the solution. This type of cultural miscommunication that can occur between members of multicultural or international teams is also discussed by Geoffrey J.S. Hart:

...in China, you can end up in serious relationship difficulty if you publicly embarrass someone by disagreeing vehemently with what they said, because of the concept of *mianzi*. *Mianzi* is usually translated as 'losing face,' but it means more than that: it represents a combination of one's public reputation and how well one will be accepted or treated because of that reputation. (7)

When working on these teams, individuals from more socially assertive cultures should remember to be sensitive to these cultural differences—both in the interest of being good and respectful collaborators as well as in the interest of creating truly effective and appropriate communication for the intended multicultural and international audiences. This collaboration or "cultural adaptation," as put by Kostelnick, should be "regarded not only as competing but also complementary" ("Cultural Adaptation" 184). The two approaches can be shown as a continuum, as evidenced in Table 1.

Table 1 Overview of the Two Approaches

	Global	Culture-Focused
Design Assumptions	Images can be simplified and homogenized to make them accessible to diverse audiences.	Something is lost in streamlining images, or the generic form itself carries cultural baggage.
Design Goals	Systemization, conventions & standards; generic forms erase cultural differences.	Design must be adapted to cultural context, partly by invoking familiar conventions.
Modes of Perception	Perception and legibility are key; universality of visual language is certified by perceptual psychology (e.g., gestalt) and empirical research.	User's interpretations create meaning; visual language is learned, experienced; testing with target audiences can enhance the adaptation.

(Kostelnick 184)

Collaboration can result in an effective localized product that is not so extreme in its localization so as to break the company's budget. It is difficult to say whether localization or a collaboration resulting in a partially localized piece of communication is best. The key is to create effective visual rhetoric for international and multicultural audiences is to gain a greater understanding of cultural differences and tailor our communication to suit these differences. If it is possible to attain proper cultural understanding through a collaboration—rather than making a strict globalization or localization choice—then this is an idea worth exploring. In order to discover if there can actually be a harmony between these two poles, more research and practice of approaches and techniques need to be discovered and explored. The way to this end may be to create a communication that is "collaborative and reciprocal [wherein] discourse participants do not stand isolated from one another, but steeped in and informed by each other's and others' discourse, they construct a new discourse" (Muneo Jay Yoshikawa and Mikhail Bakhtin discussed in Weiss "The Gods" 206). Whether the choice is collaboration or localization, cultural understanding is the key.

In the next chapter, I present a discussion of some of the many cultural types about which technical communicators must be aware so we can have a better understanding of our

international and multicultural audiences and create more effective technical communication for them. These many cultural types are a part of a culture's very fabric, so we cannot expect them to separate themselves from their culture's attributes. We must, in fact, expand our own knowledge so we can appropriately address cultural differences in the visual rhetoric we create.

CHAPTER THREE: CULTURAL CONSIDERATIONS

This chapter discusses some of the cultural aspects we must consider when creating technical communication for multicultural and international audiences. Cultures are multi-dimensional and each culture may contain various combinations of attributes: individualistic or collectivistic; universalist or particularist; high-context or low-context; high uncertainty avoidance or low uncertainty avoidance; monochronic or polychronic; linear thinking or systemic thinking.

Individualistic or Collectivistic, Universalist or Particularist

The process of increasing our understanding of cultures other than those with which we are familiar is complicated by our own ethnocentrism. Ethnocentricity is when people assume the social norms, morals, and ethics of "their" culture are the correct ones. This habit of viewing other cultures with an ethnocentric lens is what often keeps people from understanding one another.

A good example of Western ethnocentric thinking is the idea that everyone wants to be seen as a winner or someone special—someone who stands out among the crowd. However, the truth is, "Having attention called to one's errors causes a loss of face for members of the Japanese culture. Further, the Japanese do not like to be singled out from the group—even for positive attention" (Voss and Flammia 82). Another Western ethnocentric way of thinking, disguised often as cultural understanding, is assuming that all individuals around the globe are similar to one another. The idea that we are all the same and see things the same way is naïve and does not lend itself to understanding people of other cultures; however, this is actually not dissimilar to the Japanese collectivistic way of thinking that "making basic claims about normal distributions among people is not only ethical but obvious" (McCool, 181). Whether a person is

from a culture that is individualistic or collectivistic has much to do with how they interpret things. Collectivistic cultures also have different social behaviors that influence what they expect to see, or respond to, in visual rhetoric—such as photos. Mike Markel discussed this fact by comparing two photos—each one taken to show a happy, industrious office, but for two different audiences (one Western and the other Eastern): "The photo shows a cultural difference between India and the U.S. The team members are standing much closer to one another than you would expect to see in a similar shot taken in an individualistic culture such as the U.S." (128).

In addition to individualistic and collectivistic concerns, there are other cultural attributes that greatly affect an audience's perceptions. Particularist cultures emphasize personal relationships and trust through building strong social networks, while universalist cultures, on the other hand, place less importance and dependence on interpersonal relationships, and care more about professional relationships. The emphasis on personal relationships in particularist cultures allows for a certain amount of flexibility that is not accepted by the rule-emphasizing universalist culture. In a universalist culture, everyone is expected to abide by the same rules—regardless of personal relationships. So, for example, if law enforcement were to discover a family member committing a crime, they are expected to follow the rules and arrest the family member; however, in a particularist culture, it may be looked upon as shameful to arrest a family member for a crime because the officers would have a personal responsibility to that family member. This emphasis on loyalty to friends and family is not meant to have exceptions in particularist cultures.

Because culture influences all aspects of how we think, it extends into not only how we interpret visual rhetoric, but also how we learn and behave. As noted by Fons Trompenaars: "Universalism and particularism have direct relevance to information architecture because they

indicate a fundamental learning style or method" (Trompenaars qtd. in McCool 173). The ways in which an audience will interpret, use, manipulate, and process information—including technical information—are largely the result of cultural influences.

Because universalist cultures value consistency and procedures, and are informal (except concerning patterns of activity), this should dictate the way information is presented to these particular audiences. Likewise, particularist cultures value theoretical processes and are okay with frequent diversions because this is part of learning and discovery. So for audiences from particularist cultures, it may be better to arrange information so as to encourage the audiences to lead themselves to conclusions rather than simply presenting the information. As evidenced by McCool, "Diversions are also to be expected, as in the desire to learn about contextualized informal networks of meaning. Consequently, from a universalist perspective, particularist cultures prefer seemingly informal patterns of activity" (173).

Universalist cultures are partial to "analytical and minimalist modes of performance" (McCool 173) and therefore, "linear information superstructures may provide the most effective online approach" (McCool 173). These linear superstructures reduce the need for contextualized relationships and focus on process-oriented structures. This simplified and more straightforward presentation of information is more appealing and familiar to audiences of universalist cultures, but would be inappropriate and less effective (or not effective at all) for audiences of particularist cultures. Although "Either global or local embedded navigational systems may be effective for universalist cultures, as both systems address the needs of process and procedural discourse" (McCool 174), it is not often that a cultural group can be addressed through two diametrically opposed ways of presenting information. In most cases, we must choose one way of presenting information or the other to address a particular cultural "type."

It is helpful to note that universalist and individualistic cultures often share some characteristics—as do particularist and collectivistic cultures. It is not uncommon for these two pairings to accompany one another in a particular culture; however, we cannot assume the items in each pair are always mutually exclusive within a culture.

Table 2, below, shows the characteristics and values of individualistic, collectivistic, universalist, and particularist cultures.

Table 2 Characteristics and Values of Individualistic, Collectivistic, Universalist, and Particularist, Cultures

Individualistic	Collectivistic	Universalist	Particularist
Value personal accomplishments	Do not like being singled out from crowd	Exclusive personal and professional relationships	Personal relationships more important than following rules
Increased distance between self and larger cultural network	Greater identity to social groups	Professional relationships more important than interpersonal relationships	Diversions important part of learning and discovery
Perceive achievement as a product of the individual	Personal identity through individual and professional relationships	More emphasis on self	Contextualized and theoretical approaches toward performance
	Ascriptive, familial, and common identities	Value rules, consistency, and procedures	Need to address numerous scenarios and exceptions
		Analytical and minimalist modes of performance	Informal patterns of activity
		Linear and chunked information	Formal (except concerning patterns of activity)
		Formal patterns of activity	
		Informal (except concerning patterns of activity)	

(Edward C. Stewart and Milton J. Bennett, Geert Hofstede, and Trompenaars qtd. in McCool 173)

As evidenced by the characteristics shown in the table, of these four cultural types, they share some characteristics (such as the individualistic and universalist cultures sharing an emphasis on self and personal accomplishments), but also have enough important differences that we should not be dismissive of them.

High Context or Low Context

The United States is a low-context culture—so people generally convey meanings through their communication through an obvious or outward manner. Northern and Western (Germanic) countries are also low-context cultures. "Low-context communication refers to meaning dependent on clarity, concision, and the moment, presuming minimal common knowledge" (McCool 175). So, in low-context cultures, meaning is explicit and relies more on denotation than connotation and "explicit code" (Edward Hall qtd. in Wang Qiuye 553).

Characteristically, mid-context cultures fall between low-context and high-context cultures and have attributes of both. Some Latin American and Asian cultures are mid-to-high cultures, while Chinese and Japanese cultures are strictly high-context cultures. In these cultures, "meaning is largely within the construct of the situation rather than the actual words used" (Barnum and Huilin 146) and communication is "dependent on external cues such as kinesics (body), oculesics (eye), and haptics (touch), and presume a common body of knowledge" (David Victor qtd. in McCool 175). High-context communication assumes most of the understanding and knowledge is already in the recipient of the communication; therefore, "very little is in the coded, explicit, transmitted part of the message" (Hall qtd. in Wang Qiuye 553). In high context cultures, communication is implicit and more subtle—which many communicators from low-context cultures find difficult to understand and address.

Technical writers from low-context cultures are generally taught that explicit writing is always the best way to write to obtain a high level of audience comprehension. We should challenge this assumption because we know that for high-context cultures, "Technical documents...should be less explicitly written than those in a low-context culture" (Yiqin Wang and Dan Wang 47).

The need for information to be structured in a particular manner also varies from culture to culture. Because low-context cultures are rule- and linear-oriented, information must be presented as structured to meet the readers' needs. High-context cultures, in contrast, require far less structuring. Wang and Wang demonstrated that German textbooks and service manuals versus Chinese ones revealed the German ones "...were more finely and detailed structured than the Chinese ones; the Chinese mechanics needed less information than their German colleagues for troubleshooting" (47). Individuals from high-context cultures require greater context, but less detail in the information presented to them.

This, and other studies discussed in this thesis, provides further evidence for the importance of learning about cultural differences in order to best address each culture for a higher level of understanding by the audiences.

High Uncertainty Avoidance or Low Uncertainty Avoidance

"Uncertainty avoidance is the degree to which one avoids uncertain or ambiguous situations" (Geert Hofstede qtd. in McCool 174). Cultures may have a high level of uncertainty avoidance, a low level of uncertainty avoidance, or be somewhere in between. According to Hofstede, uncertainty avoidance has direct impact on preferred methods for learning. For example, the Germans, who present a high uncertainty-avoidance index, tend to prefer

"structured learning environments" with clear and "detailed assignments" in adherence to a "strict timetable" (Hofstede qtd. in McCool 119).

Other cultures have a low level of uncertainty avoidance. Hofstede suggests, "The British generally loathe excessive structure and prefer 'open-ended' environments, reasonably 'vague objectives,' and minimal or 'no timetables'" (Hofstede qtd. in McCool 175). Hofstede's observations support the idea that we cannot take any cultural aspects of communication for granted when creating visual rhetoric. The rhetoric we craft must be specifically tailored to a particular audience or it will be less effective or—at the worst—completely useless.

The United States is one of the cultures that falls somewhere between the two poles with regard to the uncertainty avoidance index. This is due in part to the U.S. belief that "learning is largely perceived as a nuance of the individual" (McCool 175). Learning styles as they relate to uncertainty avoidance came to play in a study discussed by Hofstede in which "...high uncertainty-avoidance cultures, where people typically avoid uncertain or ambiguous situations and preferred learning styles are restrictive, information architecture should be well-defined and structured" (McCool 175).

To reduce the frustration and anxiety that will lower usability or reduce the effectiveness of the learning process, we must create visual rhetoric that leads the user through the information in order to address their high uncertainty avoidance needs. However, we must also keep in mind that individuals may be from a combination of a high uncertainty-avoidance, particular, and collectivistic culture.

Monochronic or Polychronic

The way a culture views time and operates within time can also affect individuals' interpretations and understanding of technical communication. Western cultures are generally

monochronic, while Eastern and Latin American cultures are generally polychronic. A person's time orientation also affects their learning style, including time management, and it dictates the way information must be organized in order to best address their cultural orientation.

"Monochronic orientation presupposes a linear order, aligning information within discrete chunks or packets...Polychronic orientation presupposes a nonlinear order of things by presenting numerous sensory possibilities" (McCool, 177).

Time orientation is so ingrained and far-reaching in cultures that it pervades most of our behaviors—even common, everyday physical behaviors about which we are not verbally instructed are developed through exposure to them. For example,

In a monochronic culture such as the U.S., on selecting items for purchase, you step in line to wait your turn at the register. Because this market is in a culture that values sequential order, the line in which you wait is single file. Those in front of the line are served first, while those in the back of the line are served last. Contrast this image with a polychronic orientation such as Mexico. The polychronic market will not queue in single file but rather arrange in a delicate frenzy understood only by those from a polychronic culture. (McCool 177)

In everyday situations, people of a particular culture do not need to be told how to behave with respect to time, order, and space. People know without being told explicitly how to behave within our culture (or within the dominant culture in which we live) because we have learned through experience that this is how to behave. When people read and use technical communication in print or online, they bring their temporal and spacial behaviors to their reading and learning experiences. These needs must be considered when we structure technical communication and should influence our decisions regarding how we arrange information for

our audiences. "Specifically, monochronic cultures (persons who arrange themselves in single file lines) are predisposed to linear and hierarchical information superstructures...Polychronic cultures (with people who arrange themselves in seemingly random patterns), on the other hand, are predisposed toward hierarchical and web superstructures" (McCool 177).

This means our polychronic audiences (such as people from many Eastern and Latin cultures) may be best addressed with linear and hierarchical structures, while monochronic audiences needs may dictate nonlinear and more contextualized presentation of information.

Cultural Ways of Thinking and Learning

How we choose to arrange information should depend greatly upon whether an audience is of a culture with predominantly linear or systemic thinking patterns. Western audiences prefer analytical thinking patterns (Cartesian logic) while Eastern audiences prefer synthetic or integral thinking patterns. Linear, systemic, and analytical thinking patterns involve dissecting information as well as setting up rigid boundaries of information by presenting arguments upfront with supporting chunks of information. This type of thinking, based on the Cartesian logic of Descartes, encourages simple (some might say two-dimensional) reasoning that results in one hypothesis or conclusion (or the most likely hypothesis or conclusion).

Synthetic or integral thinking patterns are focused more on the whole thinking process and are less focused on narrowing and chunking information to lead to a particular conclusion or hypothesis. From a Western point of view, synthetic or integral thinking is less clear and focused, while Eastern audiences think of linear, systemic, or analytical thinking as limiting the audience and not allowing for necessary understanding of context and going through the process of discovery. As evidenced by Barnum and Li, "Chinese thought strives for unity between events or objects and their given signs or symbols" (151). So this Eastern philosophy works to create a

holistic presentation of information to the audience, rather than assuming what the audience should know and leading them to that information. This heuristic approach to the learning process allows the user to learn through the *process* of learning—rather than being instructed on exactly what should be learned.

Deductive order involves presenting a hypothesis then discussing the supporting evidence—arguing the points from the strongest to the weakest, while inductive order involves presenting supporting points that lead to the main point or idea. For the Chinese, "Thinking patterns not only influence document design, but also the arrangement of information within a document" (Barnum and Li 151). The scientific method, used by scientists when presenting results of experiments, uses inductive order. In the scientific method, the researcher asks a question, conducts background research, constructs a hypothesis, tests the hypothesis via an experiment, analyzes the data to draw a conclusion, then communicates the results. This holistic approach encourages an understanding of the full context of the situation, allows the audience to fully share in the knowledge, and may result in the audience coming to a different conclusion than the researcher.

This approach is in stark contrast to the deductive order style common to Western audiences, which relies on deductive organization. Deductive organization (often referred to as the five-paragraph theme), involves stating the main idea first, supporting the main idea (thesis) with points—with each point presented in a separate paragraph or section—followed by a conclusion paragraph that reiterates the thesis. Usually the information is presented in five paragraphs (hence the name of this style). The Western preference for deductive reasoning can be attributed to the founders of the Western rhetorical tradition in ancient Greece. Likewise, the Eastern preference for inductive reasoning can be attributed to early Eastern philosophers.

Because these rhetorical behaviors are so deeply rooted within each culture, it would be surprising if a technical communicator were able to successfully communicate ideas to one culture using a style that harkens back to an ancient and far-reaching tradition of philosophy and rhetoric from a totally different culture.

For communication to be effective, the communication must be presented in a manner familiar and comprehensible to an audience. So do any global communication techniques exist that can reconcile two completely opposing styles of thought, behavior, and learning? People are often not aware of how strongly our culture influences our behaviors. This may be the reason why people believe a simplistic, general approach to creating technical communication is possible. As evidenced by McCool, "Because these core values run deep, it should not be surprising that many people are unaware of the influence these values have in their own lives. Core cultural values require a long time to modify and are likely to remain central to a group of people for indefinite periods" (172).

Reconciling Different Standards of Culture

How do we begin to reconcile the different "standards of culture" and "attempt to describe in detail pertinent cultural concepts for specific cultures" (Pia Honold 196)? The methods of investigating culture and applying cultural knowledge to technical communication design have been the focus of many research studies. Oftentimes, the results only confirm what even preliminary investigation reveals: cultures are vastly different from one another and the best way to address a culture through technical communication is by speaking to the culture in their own language. That is not to say we have to be fluent in their particular language, but at the very least we must be able to understand the ways in which different people communicate as a result of their cultural conditioning.

Even when we believe we are considering all cultural attributes that need to be considered in order to effectively address an audience, we often overlook something because there is so very much to take into consideration. As evidenced by Hoft, "Despite earnest efforts to design for a rather different audience, albeit internationalization or localization, numerous cultural adaptations [have] failed to be considered" (McCool 167). Often, we may only learn about another culture superficially and fail to become aware of "the deeper currents of culture" (McCool 167). As we acquire knowledge that may be different from other people within our culture, "cognition may predispose us in particular directions [but] the imprint of environmental influence must not go unnoticed" (McCool 168). I believe we must go further and insist that we take environmental—cultural—influence into the utmost consideration and work to become truly enlightened regarding how other cultures differ from our own and how that affects others' communication needs.

In "A Study of Chinese and German Automobile Literature," Wang and Wang, define culture as "The collective programming of the mind that distinguishes the members of one group from another in terms of norms, values, and attitudes" (39). If people are programmed—hard-wired—from birth through their formative years and into adulthood to attach feelings and interpretations to particular design elements, then it is not likely they will adjust easily to a completely different set of interpretations. This is what would need to occur for people of international cultures to adjust to U.S.-specific design elements. As evidenced by Wang and Wang, "Among the most significant cultural differences are those involving perception and thought patterns and the processing of graphics. These differences influence the presentation of technical information in relation to the content organization and visual communication" (39).

This audience need results in our need to tailor our technical communication to international multicultural audiences appropriately in order to reduce confusion or complete lack of understanding of the visual communication and the meanings we are trying to convey.

Creating successful technical communication relies on creating rhetoric that evokes the correct ethos, pathos, and logos for the particular context—ignoring how an audience interprets communication will result in misunderstood communication. As stated by Wang and Wang, "The most important step toward successful intercultural communication involves appropriate perception of the intended subject matter by the audience" (39).

The need and expectations of audiences vary greatly not only with regard to the type of visual rhetoric presented, but the *amount* used. For example, studies have shown that "Chinese mechanics had a better understanding of graphics than the Germans. In the [test and graphic] comprehension test, the given material had been condensed, with more graphics and less text" (Wang and Wang 45). Visual rhetoric—specifically illustrations—are used in a much larger graphics-to-text ratio in Eastern cultures than are used in most Western cultures.

In addition to the differences from culture to culture regarding the need for different types and amounts of visual rhetoric, the *way* in which the visual rhetoric is presented is also deeply embedded in their psychology:

People's language environment (pictographs or phonetic language), in which they grow up, affects their visual comprehension ability. The human brain consists of a right and left hemisphere; the right hemisphere is mainly responsible for graphics and space, emotions, analogy, creativity, and instinct, and the left hemisphere is mainly responsible for language, logic, digital information, and analysis and objective. (Christine Wallin-Felkner qtd. in Wang and Wang 46)

Although all humans are born with both right- and left-brain hemispheres, the way we each think can vary from individual to individual. And the way our right and left hemispheres learn to recognize and interpret information—including technical communication—is based on how we train our brains to think as we develop, especially through our formative years. This is why cultural influences through our formative years make such a deep and lasting impression on us. Our culture influences how our brain hemispheres are trained to recognize and understand elements of visual rhetoric and these influences can vary greatly from culture to culture. "The Japanese language is considered to be a good means of training both hemispheres…Both the right and left hemispheres of the brain are trained at the same time when people learn Chinese, whereas the left hemisphere is especially trained when people learn phonetic characters" (Elizabeth Jones qtd. in Wang and Wang 46).

Because Western cultures have phonetic-based languages, people from Western cultures have more highly trained left hemispheres than right. This difference in hemisphere hard-wiring means that what is effective technical communication for one cultural audience could not possibly suffice for another if we are discussing East versus West.

Without knowing these intrinsic cultural differences that cannot be separated from the audience's psyche, we will be unable to appropriately address the audiences through our technical communication. The way to understanding other cultures and lessening the divide of understanding between cultures generally has more to do with pathos and ethos than logos. Taking the concern for pathos and ethos into consideration, we must learn more about cultural differences in order to create the appropriate pathos and ethos for our audiences through our technical communication. Only with great understanding and sensitivity to the needs of our various audiences can we begin to address our audiences effectively.

Masculine or Feminine

Cultures are generally either masculine or feminine. In masculine cultures, the gender roles are fairly well-defined—men are expected to be the more aggressive and more overall dominant of the sexes and they are meant to be focused on providing financially, while women are expected to be more concerned with nurturing and quality of life. In feminine cultures, the gender roles overlap and all people are expected to be humble, just, and care about quality of life.

Marinda Hall, Menno de Jong, and Michaël Steehouder assert: "Another aspect of this dimension is that male and female roles are clearly distinguished in masculine cultures, while there is less role differentiation between genders in feminine cultures" (490). Western cultures are generally masculine cultures—including the U.S. and much of Europe, including Austria (with the exception of Sweden). Eastern cultures are generally feminine cultures (with the exception of Japan). Also in feminine cultures, there is more of an emphasis on a balance of the feminine (yin) and the masculine (yang), such as in Eastern philosophy. There is less emphasis on a separation of roles, but rather a harmony between the two.

Masculine or feminine culture type is another fundamental cultural attribute that is ingrained in individuals through their cultural experiences and influences the audience's interpretation of visual rhetoric. This cultural aspect may be harder to address during the creation of visual rhetoric because the manifestations of it are more subtle; however, subtle or not, we need to consider it and learn how we can best address it for the benefit of our audiences.

With all these cultural aspects to consider, the task of tailoring technical communication for a particular cultural audience may seem daunting; however, if we accept other considerations as a matter of routine within our field, such as age and level of education, we should not discriminate by choosing to ignore additional cultural aspects.

In the next chapter, I discuss various cultural interpretations of color, graphics, icons/symbols, and layouts, and the logos, pathos, and ethos evoked by these elements when presented to certain Eastern and Western cultures. These different cultural interpretations are often polar opposite of one another, when East and West interpretations are juxtaposed, which is further evidence that there is no "one size fits all" solution for presenting visual rhetoric to a multicultural audience.

CHAPTER FOUR: CULTURAL INTERPRETATIONS OF COLOR, GRAPHICS, ICONS/SYMBOLS, AND LAYOUTS

This chapter offers information on how different cultures interpret colors, graphics, icons/symbols, and layouts and how we can present these elements to better address multicultural and international audiences. In the last chapter, this thesis offered information on what cultural aspects greatly affect how members of an audience interpret rhetoric—including visual rhetoric. Once we acknowledge the truth of these vital audience needs, we must delve into more specifics regarding how different cultures interpret specific element of visual rhetoric. Because visual rhetoric in technical communication must transcend cultural boundaries, we must learn how various cultures "see" color, graphics, icons/symbols, and layouts.

Designing with Color

One of the most complex design issues to deal with when creating multicultural and international visual rhetoric is color. People have strong associations with color. Technical communicators in the U.S. have been exposed to red as a color of danger so often, they sometimes take for granted that this is the feeling evoked by this color in all cultures. It is easy to see this cultural conditioning in action in the U.S.—even in popular culture. In the Alfred Hitchcock movie *Marnie*, the color red is associated with blood and violence for the main character—so much so that she becomes hysterical when presented with the color red. In the popular television series from the 1970s and 1980s, *Fantasy Island*, accents of the color red were used as a sign of warning for the inevitable doom that awaited the island visitors during their visits. So, if we technical communicators are so conditioned by our own culture, how are we to address people of various cultures who carry with them their own cultural conditioning?

Sometimes it is a lack of design knowledge that inhibits technical communicators from making

the right choice. Jo Mackiewicz asserts: "Most of us technical communicators did not go to design school, thereby acquiring a nuanced understanding of color theory...Although most of us are not as 'chromophobic' as we once were, we may lack background knowledge about color and, therefore, lack confidence in our choices" ("Color" 3).

This lack of education should not deter us from expanding our understanding of this area for the sake of our international and multicultural audiences. Jan V. White discusses the importance of—and misunderstandings about—color. White cautions technical communicators not to use color carelessly and discusses connotations attached to certain colors with respect to some particular contexts or cultures. White offers a banana example:

They are yellow, but when flecked with brown, they are ripening, yet an all-brown banana is over-ripe, and a black one is rotten (especially if it has a few patches of green). A pale-green banana is unripe, and a blue one is frozen. A purple banana is a child's version of bananahood, and a striped banana is surprising (like a purple-and-green-striped zebra). A silver banana is inedible because it is a piece of sculpture, while a polkadotted one is a joke. And a red banana is not a banana at all but a plantain. (488)

To extend White's banana discussion, a drawing of a banana-like fruit might be interpreted as a banana by some and a plantain by others. So when is a banana not a banana? When it is a plantain. This may seem trivial to some, but it might be very important—depending on what the technical communicator is trying to communicate.

Hoft's color-to-culture map, based on research presented by Hoft and other scholars, lists colors and details the significance of theses colors to various cultures. For example, the color red represents danger and has negative connotations for some Western countries, including Europe,

North America, and the U.S., but it has positive connotations in other countries such as China (prosperity, rebirth, joy), Malaysia (valor and might), and the U.K. (first place, a opposed to blue symbolizing first place in the U.S.) (Hoft excerpted and adapted in Patricia Flint, Melanie Lord Van Slyke, Doreen Stärke-Meyerring, and Aimee Thompson 242).

Using the expanded and adapted version of Hoft's table by Flint, Van Slyke. Stärke-Meyerring and Thompson shown in Table 3 of this thesis, I further expand on this mapping as shown in Table 4.

Table 3 Color-to-Culture Map Revisited, Further Expanded Part 1

Japan Future; youth; energy; love Positive	Color	Country or Culture	Significance	Connotation
Japan Villainy Negative	Blue			
Netherlands		Europe and North America		
Arab countries Thailand No meaning associated Neutral Ghana Joy Positive Egypt Truth Anglo-Saxon High-quality; corporate; masculine Germanic Feminine Meutral Malaysia Evil Negative Green Many countries Environmentally safe U.S. Proceed; capitalism; envy Japan Future; youth; energy; love Positive Muslim countries Fertility; strength Positive Muslim countries Color of Prophet Muhammad Positive Republic of Ireland Patriotism Countries with jungles Disease Negative France, Netherlands, Sweden Anglo-Saxon Good taste; envy Positive/Negativ China and Korea Pure Purple Latin America Death Egypt Virtue; faith Positive Egypt Virtue; faith Positive Regative Positive Red Red Red Europe and North America Danger Power; wealth Positive Positive Positive Negative Positive Positive Positive Red Red Red Red Red Negative Positive Pos			•	
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Ivory Coast Mourning (dark red) Negative		Malaysia		Positive
			·	Negative
U.K. First place Positive		U.K.	First place	Positive
Denmark and Argentina Lucky Positive		Denmark and Argentina	Lucky	Positive
Chad, Nigeria, and Germany Unlucky Negative			Unlucky	Negative

(Further expanded from the excerpted and adapted Hoft version in Flint, Van Slyke, Stärke-Meyerring, and Thompson 242 with additional information from Susan Stanberg)

Table 4
Color-to-Culture Map Revisited, Further Expanded Part 2

Color	Country	Significance	Connotation
Yellow			
	Anglo-Saxon	Нарру	Positive
	China	Pure and royal	Positive
	Germanic, Slavic, Japanese	Envy and jealousy	Negative
White			
	Western European	Virtue and purity	Positive
	Japan	Death and mourning	Negative
Warm (red/orange/yellow)	Most cultures	Arousing; active; lead to higher levels of anxiety; draw more attention than cool colors	Positive/Negative
Cool (blue/green/purple)			
	Most cultures	Peaceful and calm; relaxing and pleasant	Positive

(Further expanded from the excerpted and adapted Hoft version in Flint, Van Slyke, Stärke-Meyerring, and Thompson 242)

Faced with this information, any responsible technical communication can see that globalizing design might not be an option when even color choice is not a simple matter. Even within a culture, different shades of the same color can have different connotations. For example, in the U.S., bright green is often associated more with nature than dark green, and if green is paired with red, this often represents the holiday of Christmas for many people. The issue of color is further complicated by the fact that some colors tend to be preferred by females more than males, and these gender-related tastes can vary from culture to culture. So, it is equally important to consider gender with regard to color when designing for a particular audience. Laurisa Thomason helps to further complicate the issue of color (but rightfully so) by discussing that color preferences can also vary by age group in various cultures ("Design Tip: Choose your Color Carefully").

All these preferences for color choices should be taken into consideration when performing audience analysis for technical documentation projects. At the very least, technical communicators should familiarize themselves with overall cultural responses to colors to avoid negative ethos or to convey the intended pathos. Mackiewicz conducted a study in which the investigated the role of cultural background (Eastern or Western) influences participants' ratings of the attractiveness of various color combinations because they "generate different psychological and physiological responses" ("Color" 3). Cultural connotations for color are sometimes established through religious texts. In the Christian bible, there is a story in which Lazarus (a poor man) sees "...a certain rich man, which was clothed in purple and fine linen, and fared sumptuously every day" (King James Bible, Luke 16:19). This may be one of the sources or the source for many people's association between purple and wealth or majesty.

Colors also evoke different responses, culturally, with regard to whether the color is warm or cool. Research of cross-cultural color preference analysis and interpretations shows it "is often more useful and has in fact long been a standard practice to discuss people's perceptions of and preferences for different colors in terms of temperature, particularly 'warm' and 'cool'" (Rick Sutherland and Barb Karg qtd. in Mackiewicz "Perceptions" 147). Red, orange, and yellow are categorized as warm, while blue, green, and purple are cool. "Categorizing colors into groups of warm and cool originated before 1813, when Charles Hayler distinguished between the two categories in his color wheel" (John Gage qtd. in Mackiewicz "Perceptions" 22). As Wierzbicka (1990) points out, "we think of yellow as warm because of the sun, and we think of red as warm because of fire...red was rated as "hot" by participants from diverse cultures" (Anna Wierzbicka qtd in Jo Mackiewicz 147). Therefore, some associations with color *may* be somewhat global and this may sometime make our jobs easier as technical

communicators. However, we must be cautious when attempting to generalize color preferences across cultures—surface research is sometimes deceiving and is sometimes driven by assumptions. For example, "research has shown that blue is well-liked universally" (Joy Paul Guilford and Patricia Smith, Cecilia Karpowicz-Lazreg and Etienne Mullet qtd. in Mackiewicz "Perceptions" 148), so much so that there exists what is called a "blue phenomenon" (Assador Choungourian, Thomas Madden, Kelly Hewett, and Martin Roth, W.E. Simon qtd. in Mackiewicz 148). Madden, Hewett, and Roth found, in a study of 80 colors with participants from eight countries, that "blue was rated 'most liked' by participants from five of the eight countries, and green was rated second highest by participants from the other three countries" (Madden, Hewett, and Roth qtd. in Mackiewicz 148). Some of the older research seems in opposition to newer research—and to research done around the same time—that shows color preference actually varies quite a bit from culture to culture.

This disregard of differences in color interpretation from culture to culture occurs far too often in Western technical communication scholarship. It is as if the profession hopes the fact of international and multicultural audiences will disappear—or perhaps they assume these audiences will become homogenized over time, resulting in an audience for whom their standard color theory and usage is appropriate.

White offers advice to technical communicators for when they discover that a particular color (or design element) is effective for a certain audience—"repeat and repeat and repeat" (White 488).

Designing Graphics

People are often unaware of their own ethnocentricity. An example of this is how many people do not take notice of—or question—the way in which maps "typically depict the country

in which they are created in the middle—as the center of the world" (Voss and Flammia 82). Like with many aspects of difference, people often do not see things through a different lens than the one they are provided by their own culture. In the field of technical communication, we need to learn to adjust our lens—and our visual rhetoric—in order to create effective graphics.

One of the problems with using ethnocentric visual rhetoric is the way in which people are portrayed in graphics. These portrayals may not only be inappropriate for a particular audience, but can actually be offensive to a group of people. Flint (et al.) offers details regarding how to—or how not to—depict people in illustrations, giving detailed instructions such as not showing overt gender roles or showing the soles of the feet, as this is offensive to people in certain cultures (241). Table 5 offers useful and sensitive suggestions to assist technical communicators in creating localized documents.

Table 5 Sensitive Areas for Depicting People

Area	Advice
Race	Avoid indicating skin color-pure black and pure white better represents generic skin.
	Use unshaded line drawings of people.
	Use simple, abstract figures, devoid of recognizable bone structure or hair style.
Gender	Avoid public display of physical contact between the sexes.
	Be sure depiction of women is not offensive, in either the East or the West.
	Avoid overt gender roles.
	Avoid showing exposed female body parts (For example, in some Islamic cultures, only the hands and eyes of women may be shown.)
Nudity	Nudity is readily accepted in Western Europe, but not in many other countries.
	Exposure of individual body parts can be offensive, especially if female.
	In Asia, never show the soles of the feet.
Hand Gestures	Use hands only to promote clarity; show them manipulating a recognizable object or performing a procedure.
	Stylize hands so they are not clearly male or female.
	If a procedure can be performed as easily with either left or right hand, show it being performed with the right hand (the left hand is unclean for some tasks in some Arabic countries.

(Flint, Van Slyke, Stärke-Meyerring, and Thompson 241)

Often, Western technical communicators are not aware there are cultural taboos in other cultures related to hands, feet, and gender. Even when depicting people in illustrations, we must be especially careful to avoid offending any of our audiences because this will render any technical communication related to the offending material, useless. Creating poor ethos or pathos as a result of ignorance or an unrealistic idea that visual rhetoric can be easily made "global," is not good technical communication practice.

Waka Fukuoka, Yukiko Kojima, and Jan H. Spyridakis, conducted a two-part study regarding Japanese and American readers' responses to illustrations and cartoons used in conjunction with technical documents. Based on the first part of the study, the researchers arrived at three major hypotheses: A) "Japanese subjects will prefer the formats with illustrations more than American subjects," B) "Both American and Japanese subjects will believe that

formats with some illustrations will help them complete tasks more easily and more quickly," and C) "Japanese subjects will have more positive attitudes about cartoons than American subjects" (169). The second part of the study revealed that hypothesis B was correct, but hypotheses A and C were not. These findings are very important to technical communicators who wish to localize their documents (whether print or online) for Japanese users. We can use this information to create effective visual rhetoric for our Japanese audiences. Illustrations are also the focal point for the research conducted and discussed by Wang Qiuye, which gives insight regarding cultural characteristics such as Japanese document design "emphasiz[ing] [a]esthetic effects and ambiguity" and "intend[ing] to show off, impress the reader" (553).

There are many cultural aspects to consider when creating visual rhetoric for international or multicultural audiences—everything from the fact that not everyone reads or scans material from left to right to taking into consideration non-verbals and graphics. For example, hand gestures or amounts shown on fingers and hands may be considered universal, but this is not the case—if an American holds up one index finger it represents a value of one; however, if a German holds up one index finder, it represents a value of two (being the second digit on the hand, counting the thumb). Also, if depicting the "traditional American circular thumb-and-finger symbol for 'OK' in an illustration, this can be misconstrued in Japan as meaning money, or in Brazil as an obscene gesture (Voss and Flammia 84).

An example of a time when even an invented illustration can be offensive to people of a culture is "...when Apple Computer used a drawing of a figure that was half cow and half dog—called a *moof*—as an icon in one of its programs, there was a negative reaction from many followers of the Hindu religion in which the cow is a sacred symbol" (Harriet Fernandes qtd. in Voss and Flammia 84). Gender depictions can also cause offense. For some Middle Eastern

(specifically Islamic) audiences, it might be inappropriate to show women working in a workplace or to use them to illustrate examples (in manuals, for example).

When creating and using cartoons as illustrations in technical communication, Western communicators often make assumptions about what the audience will understand, which can lead to confusion and—depending on the subject matter—personal harm. Barnum and Huilin discuss a manual illustration that would not have the same connotations and denotations for a Western audience as it would for the Eastern audience for whom it was created:

Moving down the left column to the lower left frame, we see that the refrigerator is personified as "sweating" from bearing a heavy load. The illustration shows a TV on top of the refrigerator to suggest the meaning of heavy object. No explanation of what constitutes other examples of "heavy" objects is provided, nor is any guidance given as to how much weight the refrigerator can bear. Because Chinese apartments are typically small, it is common practice to put other objects on top of the refrigerator, such as a microwave oven, TV set, or fish tank. (162)

A Western audience might notice the lack of text to describe safety issues related to using the refrigerator in this manual. Usually, in Western technical communication, there are warnings and cautions both at the beginning of the document and throughout the document. According to Barnum and Huilin, the meaning of this instruction and the lack of safety warnings would not pose a problem for Chinese users because "...the Chinese writing requirement to respond to a picture may reflect the cultural importance of being able to interpret meaning from pictures in a way that is different from that of Americans" (149). This is because from a very young age, Chinese students are taught to deduce what they have read (including illustrations) and are often asked to provide a summary of their interpretation. This technique shows the Eastern way of

processing information discussed in Chapter 3 of this thesis, that many Eastern audiences "value intuition over direct statement" (Barnum and Huilin 149).

This in-depth examination and processing of visual rhetoric is evidenced in a Chinese essay assignment for which the instructions are to "Study the picture carefully and write an essay in which you should 1) describe the picture, 2) interpret its meaning, and 3) make a comment on the phenomena" (Barnum and Huilin 149). This is a typical assignment one might see in an Eastern school and shows how the students' cultural thinking patterns are shaped from a young age. Western children's thinking patterns are defined just as specifically, but differently—which accounts for why it is impossible for people of one culture to design visual rhetoric for an audience of another culture without first learning more about that culture. When we cannot—or should not—use one illustration that works for all cultures, we should "Show all possible instances" (Jones et al qtd. in William Horton 685) in order to make sure everyone understands the communication.

Designing with Icons and Symbols

Many technical communicators may take for granted of the efforts by the International Organization for Standardization (ISO), C.K. Bliss (Bliss Semantography), the American Institute of Graphic Arts (AIGA), and other reputable organizations, to create internationally-recognized symbols as a good thing for technical communication audiences. However, Laura Gurak presents compelling arguments against the standardization of icons. Gurak summarizes the standardization-of-icons argument by saying, "To some extent, standardizing icons requires us to draw on the saying of the Green political party: 'Think globally, act locally.' By thinking of the big picture, we can design more effectively at the local level" (495). Taking all cultural

aspects into consideration, we see that it would be naïve to believe that there can be a one-sizefits-all solution for any type of visual rhetoric.

Voss and Flammia suggest some examples of addressing international and multicultural audiences using localization techniques:

In a manual targeted to a multinational audience, icons were used to highlight content that related to particular audience members...Before: On a sample page, for users in Mexico, a sombrero is used; for users in China, chopsticks are used; for users in Eastern Europe, a girl dressed in a fold costume is used. After: On the revised sample page, rather than an icon, each section is introduced graphically with flags of the nations to which the content pertains, along with reinforcing verbal content in the form of sub-headings. For users in Mexico, China, Eastern Europe, and so on. (83)

When creating technical communication, we avoid using stereotypical cultural images. These sorts of oversimplified and inaccurate representations of people are insulting and ineffective for our audiences. As Voss and Flammia put it, "While sombreros and chopsticks may still be used on tourist advertisements, they are not the best choice for culturally sensitive technical documentation" (83).

Voss and Flammia offer another example of how a company addressed international and multicultural audiences through visual technical communication:

Jackie Martinez heads a development team charged with the responsibility for creating a bilingual Web site for a large insurance company with clients worldwide; a large percentage of the company's clients are located in south Asia. The Web site will be created in English and Hindi. Before: Web page showing map of India and Pakistan, with Kashmir clearly attributed to one country or the other. After: Web page without map,

with images of extended family instead. In the first Web page, the designers have made the mistake of overlooking the political tensions that exist between India and Pakistan, specifically the contested territory of Kashmir...In the revised version, the map with the politically contested territory is gone; in its place is an image of an extended family enjoying a celebration together. This image is particularly appropriate for the intended audience because families are very close knit in both Indian and Pakistani culture and extended families often all live together throughout their lives. (83)

With this example, Voss and Flammia remind us that we must take into consideration political, economic, social, educational, and religious values of other cultures when creating technical communication. And we must remember that there are not only cultural differences between larger cultural groups, but also differences within each larger cultural group. Some areas of the world have shifting political tensions, which require us to be even more culturally sensitive and up-to-date on world events. Ours is not a field in which we can rest on our historical knowledge and still do an effective job. We must especially take pains to remove ethnocentric references from our technical communication in order to make it more effective for non-Western audiences. Voss and Flammia offer the example of using "clever iconography, graphics, even humor" to call attention to key ideas and to engage the audience. However, we should use caution when using these techniques within an intercultural context because of the risk of miscommunication or causing offense. Using a phrase like "It's Miller time" and showing a person drinking a beer with their feet up on a desk when advertising labor-saving equipment can cause serious offense to people of Middle Eastern cultures. An alternative for the ad was to show the person in a relaxed, smiling pose, but without the alcohol (which is prohibited by Islamic and Muslim cultures) and without showing the bottom of his feet (which is considered an insult in Middle Eastern cultures). The phrase "It's Miller time" was replaced with the phrase "the machine does the work so that you don't have to do it" (84).

Although this may seem like an extreme example, once we are made aware of the sensitivities of other cultures and begin to view the communication around us, we see that gross examples of insensitivity and ignorance are actually quite commonplace. Even as our world seems to get smaller because of our Internet exposure to international images and information, we still take for granted that some symbols may be globally understood. For example, emoticons are widely used in online communication (now, even in business communication to help clarify tone), but not all emoticons are interpreted the same way—nor do all cultures have the same library of emoticons. Japanese emoticons represent a much wider range of emotions—to convey a more sophisticated or nuanced range of feelings, and to better reflect their own culture. So when is a smiley:-) not a smiley? When it is a Japanese smiley (^_^). Table 6, below, offers examples of some of the Japanese emoticons and their meanings.

Table 6 Japanese Emoticons

Emoticon	Meaning
Expressions of Feeling	
(^ ^)	It is very popular
(*^_^*)	Blushing while smiling
\(^0^)/	Raising hands and saying "wow"
(>_<)	Indicating pain or failure
p(^^)q	Holding a banner and cheering
(TT)	Crying with tears running down the cheeks
()zzz	Saying good night
(?)	Saying, "I do not understand." or asking, "Do you understand?"
(^_^)V	Making the victory sign
(p)	Trying to uncover some secret
(^^)//	Showing appreciation for something
(↑०↑)	Happy to the point of tears
(^-^)b	Asking, "Do you agree?" or "Is it not?"
()	Angry, but not expressing it on the outside
Expressions of Jana	nese comics (Manga)
(^_^;)	Too amazed to say anything and in a cold sweat
(_ ,, () ()	Looking around restlessly but curiously
(@_@)	Dizzy and giddy
((((((^_^;	Looking uncomfortable and wanting to leave
(>_<)(>_<)	Denying strongly by shaking head
Actions	
Actions (^_^)/□☆□\(^_^)	Two people holding sunglasses and saying "cheers" (giving a toast)
m () m	Saying "sorry" or "please take care of that affair for me"
o(^) O	Gently punching as a sign of encouragement
W(,0,)M	Roaring in anger with mouth wide open
(^ 3 ^)-☆Chu!!	Sending out a loud kiss
(^.^)/~~~	Waving a handkerchief and saying "good-bye"
(;_;)/~~~	Saying a tearful "good-bye"
()y _o oO	Feeling relaxed, like after having a cigarette, or wanting a break for a cigarette
(^)-☆	Giving a wink
(^)db(^)	Making a promise by linking little fingers with each other
\(^o\) (/o^)/	Dancing with joy but the style seems to be the Bon festival dance
Personalities	
<*)) >=<	Fish
(o o)	Eternal superhero for children
(V)o\o(V)	Enemy of Ultraman
(=^.^=)	Am I pretty?
~~~~(m)m	Japanese ghost without legs
(Hiroe Takagi)	

(Hiroe Takagi)

Some of the emoticons in Table 6 arose from Japanese comic (Manga) culture, so even within the Japanese culture, not all of the audience would be familiar with these particular emoticons. Why is this information important to technical communicators? Because the lines between formal and informal communication are becoming blurred with new generations who spend so much time online and see little or no separation between socializing and networking. Additionally, the spaces within which we communicate (such as blogs, forums, etc.) are changing the way we meet and communicate with business contacts. Whether or not older generations of communicators agree or approve, the way we communicate—even in the business world—is changing and we must change with it or be left behind.

Aspects of visual rhetoric that do not translate well from one culture to another include puns and verbal analogies (such as a mouse animal to represent a computer mouse), initials and punctuation marks (such as a question mark for answers to questions), mythological and religious symbols (such as an illustration of the grim reaper to alert the user to a fatal software error), and animals (such as rabbits, which are a food source in Germany but considered vermin in Australia) (Horton 686).

#### Web and Print Layout Design

Online layout (specifically web design) usually involves consideration for multiple audiences—especially when designing websites for large companies or organizations. Some Western companies are often guilty of choosing to rely solely on global web design rather than using their resources to tailor websites for their multicultural and international audiences. "Some Fortune 500 companies have failed to provide multilingual documents on their websites, a pattern that is inconsistent with their globalization goals" (Canchu Lin 40). Not designing for multiple audiences thwarts these companies' efforts to appeal to multiple audiences.

David Gillette warns technical communicators from creating "typically American web design" (16) that will be problematic for some international users. When Western-centric designers chunk information onto multiple pages, it does not support users in offices where multiple employees must share Internet-access computers because the American style of web design does not lend itself well to quick printing of comprehensive information; instead, users must print one web page of information, click to the next page and print that (related) page, and so on.

Gillette also discusses how Japanese web design differs from U.S. web design. Japanese websites have pages that are made to load quickly, fewer pages altogether, and fewer links to additional pages. This design allows for pages that "users can quickly understand [regarding] the scope of the entire site, just as holding a small book gives you a sense of how much information it contains" (17). The American-style websites contain so many separated text chunks that they often "leave Japanese users feeling that there is important information somewhere in the site that they will not have time to find" (17). This is just the type of user frustration that technical communicators can avoid by being more sensitive to cultural differences and focusing on localizing design. Design globalization would not allow for both American and Japanese users to be satisfied with a website's design because you cannot create a website that is simultaneously chunked and complicated but also scroll-and-print-friendly and narrow of scope.

Anthony Faiola and Sorin A. Matei discuss how communicators can address multicultural and international audiences in web design: "Differences in cognitive style will drive variations in web design based on national cultural orientation. By observing the design of graphics, text, and information architecture, we can understand how processes of strategizing by culturally diverse web designers influence their cognitive skills toward a holistic or analytic orientation" (381).

Faiola and Matei conducted a study in which they sought to gain support for their theory: "Online task time performance of users will be faster when using web sites created by designers from their own national culture" (381). The study was conducted with Chinese and American users and concluded that the users' task performance times were, indeed, faster when navigating websites created by people who share their cultural backgrounds. All the aspects related to the study give technical communicators valuable insight into creating web design for multicultural and international audiences.

Although Faiola and Matei based their study on users responding best to websites created by people sharing their particular cultural background, the study can help technical communicators to understand the importance of becoming as familiar with a culture as possible in order to create the most user-appropriate design, as described by McCool:

Increased context for the online environment may encourage thick description and force increased chunking and complexity...Embedded navigational approaches should emphasize related information and reinforce the contextual nature of the material...A non-linear structure fits neatly within the requirements of particularist and collectivist values, allowing for both increased context and specific examples, while de-emphasizing individual modes of performance. (174)

Lin discusses various approaches to designing web pages for multiple audiences—including multicultural and international audiences. Lin suggests that page layout can be "used to accomplish the goal of inclusion" (40) by creating multiple, similar pages with each addressing a different audience. Lin explains that the designer can apply this local approach, taking the cultural attributes of that particular culture in mind (41). This approach ensures that each culture can be addressed appropriately and more intimately, thus creating better ethos and pathos.

Pinfan Zhu and Kirk St. Amant suggest: "Cultural rhetorical differences...can affect the ways in which the average American consumer perceives online information created by Chinese writers and developers" (171). They go on to discuss how U.S. audiences prefer "a more direct, linear structure of presentation with each point connecting to the next" (Barnum and Huilin and C. P. Campbell, and Hall qtd. in Zhu and St. Amant 172). This is in contrast to the Chinese, who often prefer a more "spiral" approach. In a spiral approach, the individual works around key issues without really addressing them directly (Barnum and Huilin and J.M. Ulijn and St. Amant and Campbell and Hall qtd. in Zhu and St. Amant 172).

Western web designers are not the only ones guilty of trying to create visual rhetoric without fully taking into account the subtleties of the culture for which they are designing. Some technical communicators have noticed a tendency for Chinese websites to "mimic" U.S. websites. "Many of these sites, however, fail to account for the finer rhetorical nuances audiences from other cultures—such as Americans—associate with credible (or usable) presentations in this medium" (Lise Agerbaek qtd. in Zhu and St. Amant 173).

Some of the Eastern-style elements of the Chinese websites designed for U.S. audiences included links organized according to the Chinese reading pattern (information in columns read top to bottom instead of left to right), as well as information located within many links that requires the audience to scan up and down the page instead of back and forth and left to right (David Farkas and J.B. Farkas and Barnum qtd. in Zhu and St. Amant 176). Roberta Kaplan also notes that English speakers tend to follow a linear (direct) pattern in their writing, while people from Asian countries follow nonlinear or indirect (spiral or zigzagged) patterns (Zhu and St. Amant 178). "Such differences, in turn, have been noted as key problem areas in American-Chinese interactions" (Barnum and Huilin, Campbell, and Weiss qtd. in Zhu and St. Amant 178).

Traditional Chinese writing begins in the upper right and descends vertically, such that the reader reads the column beginning at the right, then reading the left. When simplified characters were introduced in the People's Republic of China, along with a Romanized alphabet (Pinyin), Chinese writing changed to a left-to-right horizontal orientation, and no longer used the right-to-left, vertical orientation" (Barnum and Huilin 162).

Some of the cultural differences stem from the fact that, "People from different cultures hold different philosophical views regarding how much the audience should be involved in the writing process" (John Hinds qtd. in Zhu and St. Amant 181). Hinds identifies two types of writing: 1) The writer-responsible type; 2) The reader responsible type (Zhu and St. Amant 181). Chinese are the reader-responsible type, while U.S. writing typically falls into the writer-responsible type. The different way in which cultures view the role of the audience in the writing process greatly influences how people of that culture behave when writing. In the U.S. writing process, "authors are taught to consider and address audience needs when producing a document...In contrast, Chinese writers often present ideas according [to] what they think necessary to say rather than what the audience might actually need" (Zhu and St. Amant 181).

Much like web design, audience needs for page design vary greatly from culture to culture. Barnum and Huilin comment:

Compared with American technical documents, Chinese technical documents, especially those intended for officials or decision makers, usually lack page design elements such as controlled use of white space, in-text emphasis, diagrams, lists, a variety of type sizes and fonts, and so forth. In a Chinese document, headings may be used grudgingly but sparingly, and paragraphs are generally quite long. (150)

Something in Chinese document design that is in stark contrast to much U.S. document design is the fact that, "Chinese writers tend to give priority to the content of a document over its design" (Barnum and Li 150). This extends to expecting readers to read every word in a document and consider all content important. U.S. document design, on the other hand, assumes the writer will skim or skip through the information so they require the most important information to be presented at the beginning, at the end, or have special indicators to call the reader's attention to the information.

In addition to the many usability, comprehension, and other logos-related concerns for layout choices when creating visual rhetoric for multicultural and international audiences, there are pathos concerns that should be taken into consideration. Among these is the concern that "Values can also be associated with direction. For instance, righteousness and power are associated with the right hand in Western cultures. In the Chinese tradition, however, honor dwells on the left hand, and on the right self-destruction and violence (Cooper qtd. in Horton 684). This means using a Western-style layout for an Eastern (specifically Chinese) audience may result in poor pathos—which, in turn, can cause the audience to have negative feelings toward the information and group presenting the information, thereby also creating negative ethos.

#### Presentation Design

Designing presentations is something technical communicators are often called upon to do, but it is not discussed as often as document or web design. St. Amant does discuss this, however, and he takes an extreme globalization stance with regard to the design. St. Amant iustifies this:

Miscommunication can result from something as simple as different meanings associated with the same symbol, color, or feature. When creating visual aids for international presentations, it is best to keep the number of visuals to a minimum regardless of the language of the presentation. The fewer visual aids a presenter uses, the less change there is for miscommunication or misinterpretation. Images of people, objects, or events are particularly problematic: They should probably be avoided altogether. (15)

St. Amant's stance is unrealistic for three basic reasons: first, if the presentation is specifically for a particular audience, then that audience will be expecting the presentation to be catered to them (and rightfully so); second, some cultures expect many visuals in presentations and may actually be offended by the lack thereof (or at least left with a bad sense of ethos for the presenters); and, third, using no design elements is not good design. Instead, it is void of design. A lack of design results in a lack of effective use of visual rhetoric and may actually result in no message being communicated at all.

The Western style of presenting information often dictates a rigid format. This does not mean Eastern writers are not expected to structure their documents. As asserted by Barnum and Li: "Chinese writers are taught that documents should assume a structure [but] the structure is less specifically defined, consisting of a beginning, a middle and an end" (154).

In the next chapter, the Conclusion, I summarize the research and points discussed in this thesis and offer some ways for technical communicators to address the complex issue of learning to create technical communicator, including visual rhetoric, for international and multicultural audiences. I also offer some areas for further research and offer some questions for consideration.

## **CHAPTER FIVE: CONCLUSION**

Horton reminds us that: "Graphics cannot totally replace words. However, with careful design they can bridge barriers of language and culture" (682). Sometimes our cultural conditioning does not necessarily cause us to dismiss or criticize new information, but causes us confusion and makes it difficult for us to understand the information. We become accustomed to seeing things—and thinking about things—in a certain way, and we have trouble understanding information that discusses concepts with which we are unfamiliar. So much goes into our cultural conditioning and it is so deeply ingrained that it is not easy for us to step out of our cultural "boxes." These issues, as well as many more, will arise when a technical communicator is responsible and conscientious enough to expand their knowledge of international cultures. Though choosing to seek out and use this diverse cultural information may cause more complications in process of creating rhetoric for technical communication, the richly diverse information with which the researcher will be bestowed helps to enlighten both the technical communicator and their work. In the future, some of these issues related to using international cultural research may be alleviated by the vast communication options available through technology. Technology cannot, and never will, remedy a human's tendency toward ethnocentricity, bias, and judgment—that is something each technical communicator must remedy for him- or herself through "patience, tolerance, objectivity, empathy, and respect" ("The Gods" Weiss 203). As evidenced in this thesis, there are many aspects to consider when creating technical communication for intercultural and multicultural audiences. As McCool asserts:

Overlaying cultural dimensions on information architecture is the final and most important step toward localization, the missing adaptation for developing...information for other cultures. One of the difficulties of proposing intercultural adaptations is

persuading developers, especially U.S. developers, that not all cultures perceive and ascribe meaning in ways similar to our own, and omitting this consideration reflects and reinforces universalist values. These universalist values presume that we are all basically the same... (181)

As this thesis has shown, when it comes to visual rhetoric, we are very different from culture to culture. We cannot allow our own cultural conditioning color how we view other cultures—which includes not allowing our Western, universalist lens to fool us into thinking we are all the same.

# **Key Findings**

The key findings I discovered through my research and through writing this thesis are threefold: 1) The design styles we are learning and using as Western technical communicators are not appropriate for all audiences, 2) Interpretations of visual rhetoric vary from culture to culture, and 3) We must adapt new knowledge of multicultural and international needs for visual rhetoric into our collective repertoire in order to be more versatile communicators.

Cultural differences are vast and run deeply in cultures—therefore, people cannot be expected to set aside their cultural conditioning when experiencing rhetoric. As technical communicators who create visual rhetoric, we must expand and deepen our knowledge of cultural differences—and consider these differences as synonymous with audience needs—in order to address our multicultural and international audiences more effectively.

### Recommendations

Based on the research and information presented in this thesis, my recommendations for the best approach for creating international technical communication (globalization, localization, or a combination of both) is for us to work in multicultural and international collaboration teams in order to create technical communication (including visual rhetoric) that is effective and appropriate for our audiences. This strategy should have a strong foundation in good localization practices and include extensive consideration for—and knowledge of—the cultures with whom we wish to communicate.

# Opportunities for Further Research

Opportunities for further research in the area of international and multicultural visual rhetoric in the field of technical communication include discovering more and better techniques for collaborating in multicultural and international teams—in order to create the most effective multicultural and international technical communication for our audiences.

Despite the obstacles and sometimes steep learning curve involved in expanding our knowledge to include the many cultural considerations for our audiences, this is not an impossible task. As audience advocates, we technical communicators have a responsibility to understand *all* our audiences and respond to these needs accordingly. As Hoft so aptly put it, "We have the tools to make it work" (147)—now we just need to decide to commit ourselves to *all* our audiences and follow through.

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