

**COMMUNICATING TECHNICAL INFORMATION
TO THE CHINESE: A CULTURAL ANALYSIS
WITH GUIDELINES**

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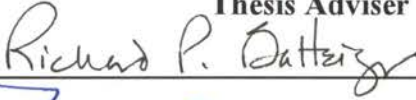
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TABLE OF CONTENTS

Chapter	Page
CHAPTER 1	
INTRODUCTION.....	1
Need for the Study.....	2
Review of the Literature	8
Globalization of Technical Communication.....	10
Localization of Technical Communication	17
Scope, Audience, Definitions	22
Scope.....	22
Audience.....	23
Definitions	23
Chapter Preview.....	24
CHAPTER 2	
CHINESE MODE OF THINKING.....	26
Chinese Systems of Thought and Relational/Holistic Thinking	29
Confucianism and Relational/Holistic Thinking	31
Taoism and Relational/Holistic Thinking.....	41
Yin-Yang Principle and Relational/Holistic Thinking.....	52
Chinese Language and Relational/Holistic Thinking.....	55
Chinese Characters	56
1) Pictographs	57
2) Ideographs.....	58
3) Compound ideographs	59
4) Phonetic compounds	62

Chapter	Page
Chinese Compound Expressions	66
Chinese Syntax	67
Chinese Landscape Painting and Relational/Holistic Thinking	69
Lei Feng and Holistic/Relational Thinking	72
Summary and Implications for Cross-Cultural Technical Communicators.....	74

CHAPTER 3

ANALOGY AS A SIGNIFICANT ELEMENT IN CHINESE PERSUASION	78
Why the Chinese Rely Heavily on Analogy in Persuasion	81
Functions of Analogy	82
Influence of Relational and Holistic Thinking.....	85
Contribution of Cultural Values	86
Emphasis on History.....	86
Pursuit of Harmony	88
Confucian and Taoist Heritage.....	89
Historical Background	91
Confucian Approach	91
Taoist Approach.....	94
Examples of Chinese Persuasion Using Analogy	95
Interactive Argumentation	95
Persuasive Presentation.....	98
Persuasion in Unsolicited Situations	103
Persuasion in Solicited Situations	111
Analogy in Modern Chinese Persuasion.....	117
Summary and Implications for Cross-Cultural Technical Communicators.....	123

CHAPTER 4

RECOMMENDATIONS FOR CREATING TECHNICAL DOCUMENTS	
FOR THE CHINESE.....	126

Chapter	Page
Culturally-Related Guidelines	131
Use a respectful and friendly tone.....	131
Why the Chinese use this tone.....	132
How to create a respectful and friendly tone.....	134
Application	136
Use “we” instead of “I.”	139
Application	141
Use the general-to-specific or big-to-small patterns to organize information.....	142
Application	147
Use analogies to explain the complex and strange.	148
Application	151
Use analogies to aid persuasion.	152
Application	157
Make plentiful use of visuals.	158
Why use plenty of visuals.....	160
What type of visuals to use.....	165
Design elements—shape.....	166
Design elements—color	168
Design elements—text arrangement.....	170
Application	173
Conclusion	174
 CHAPTER 5	
CONCLUSION.....	176
 WORKS CITED	182

LIST OF FIGURES

Figure	Page
Figure 2-1. The Confucian Model of How an Ideal Society Can Be Created.	43
Figure 2-2. Taoist View of Humans and Universe.	51
Figure 2-3. The Typical Chinese View of an Ideal Life.	54
Figure 2-4. <i>Taijitu</i> , or <i>Taiji</i> Visual.	56
Figure 4-1. Example of Concrete Visuals Used in a Classical Chinese Technical Document.	163
Figure 4-2. Example of Concrete Visuals Used in a Classical Chinese Technical Document.	164
Figure 4-3. Continuum of Shapes in Terms of Associations.	167
Figure 4-4. Chinese Text in Horizontal and Vertical Formats.	171

LIST OF TABLES

Table	Page
Table 2-1. Examples of Chinese Pictographs.	59
Table 2-2. Examples of Chinese Ideographs.....	60
Table 2-3. Examples of Chinese Compound Ideographs.....	62
Table 2-4. Examples of Chinese Phonetic Compounds.....	65

CHAPTER 1

INTRODUCTION

With the globalization of world trade, cross-cultural technical communication is becoming increasingly important. More and more technical communicators find themselves in a situation to write for an audience whose cultural background is different from their own. Thus, in addition to the considerations involved in a normal writing situation, such as an audience's need for information and level of skill, these technical communicators need to consider cultural elements as well. Because a lack of knowledge of the culture is one major problem affecting the effectiveness of the cross-cultural communication (Dakich 1989), cross-cultural technical communicators must understand the communication practices of other cultures, including thinking and persuasion, when creating effective technical documents for cross-cultural audiences. Practical, culture-specific guidelines based on such understanding are especially needed to help cross-cultural technical communicators create documents suited to the audience of the specific culture.

The present study attempts to meet this need. It examines the thinking mode and persuasive strategies used in the Chinese culture and provides general guidelines for creating technical documents for people of the Chinese cultural background. Because the

Chinese are playing an increasingly important role in world trade, they are among the potential audiences of the cross-cultural technical communicator.

In the rest of the chapter, I will explain the need for the study, review some literature, define the audience and scope for the study, and preview the following chapters. I will also define several terms I use frequently in the dissertation.

Need for the Study

Over the last twenty years, international business has increased dramatically. In the 1980s, more than 30,000 U.S. companies were exporting products abroad (Lathan 1982). All major companies had international operations of one kind or another, and others were planning to have such operations (Mackin 1989). For many companies in the 1990s, such as the Digital Equipment Corporation, exports are responsible for 25 to 50% of total sales (Sprung 1990). It is not surprising, then, that export sales made up twice as large a part of the U.S. Gross National Product in 1991 as they did just 20 years ago (Limaye and Victor 1991). Considering the fact that more and more companies are engaging in international operations, this percentage is undoubtedly higher now.

One of the major difficulties international business encounters is that of communicating effectively between cultures (Glenn 1962). Along with the products that are crossing borders are technical publications of all kinds (Weymouth 1990). Although 95 to 99% of the correspondence in international business is conducted in English regardless of the country of origin or receipt (Kilpatrick 1984), communication problems

still exist. Using English as an international language does not necessarily imply a shared value system and a common way of information processing.

Emily Thrush describes a real world situation that is a very good example of communication problems in international technical communication (1993). Some U.S. engineers were installing Korean-made escalators in Mexico. The Korean manufacturer provided an English translation of the installation and maintenance instructions.

However, these instructions were organized so differently from those the engineers were used to that they were virtually useless. Technical writers at the home office had to rewrite the instructions. However, the writers also had to consider whether even these rewritten instructions would be suitable for use by the Mexican engineers who would subsequently maintain the equipment. They had to consider if they needed to produce yet another version of the manual for the Mexican engineers.

William Horton (1989) also tells of examples of cross-cultural communication problems. An advertisement for laundry detergent failed in the Middle East because it had not taken into account the different reading habits among cultures. The advertisement showed dirty clothes on the left, a box of the detergent in the middle, and clean clothes on the right. Because Arabic is read primarily right to left, the effect of the advertisement was opposite of what the product's manufacturers wanted. Another example of cross-cultural miscommunication involved the different associations of color for different cultures. Designers for the United States Indian Service used color codes for the candidates in a Navajo election, which inadvertently biased voting. In the Navajo

culture, blue symbolizes good and red bad. Later, the designers replaced the colors with the photographs of the candidates.

We may even find examples of cross-cultural communication problems in the lives around us. According to some Chinese graduate students in the Computer Science Department at Oklahoma State University, a textbook on object-oriented programming has been causing them many comprehension problems. The American author used American culture-specific analogies to explain the difficult object-oriented concepts. Consequently, these analogies, inappropriate for people of a different cultural background, increase, rather than relieve, the load of cognition for these people. (I will describe this example in more detail in Chapter 4.)

A professor of English at Oklahoma State University also talked about his experience with a cross-cultural communication problem. He purchased a modem that was made in China. When he tried to assemble the modem following the accompanying instructions, he found the instructions not at all helpful. Although the instructions were in English, they were written in a way different from his expectations, which caused comprehension problems.

Clearly, there are many such communication problems in the cross-cultural context, and the increasing globalization of world trade is likely to increase their occurrences. In order to avoid such problems and achieve effective communication, cross-cultural technical communicators face an unusual challenge. In addition to the considerations involved in a normal writing situation, cross-cultural technical communicators need to understand the language, communication practices, and thinking

of the other culture as well. Consequently, a growing interest in international technical communication has been one of the most significant developments in technical communication during the 1980s and 1990s (Kohl et al. 1993). The best proof is the establishment of the International Technical Communication Professional Interest Committee within the Society for Technical Communication in 1989 (Hoft 1995).

Quite a few articles have appeared in recent years that deal with international technical communication in terms of a specific culture. Some discuss technical communication from the perspective of a particular culture; others provide insights into how to create technical documents for users of that culture. That particular culture has often been Japanese, as the literature review section below will show. In fact, Kohl et al. refer to communication with the Japanese as the “focal point” of the growing interest in international technical communication during the 1980s and 1990s (1993, 62). This special interest in Japan is due to the close economic relation between the U.S. and Japan (many of the researchers are Americans), as well as the significant position Japan has in the world economy.

There is now a growing need to study cross-cultural technical communication involving Chinese culture. With the open-door policy and fifteen years of successful reforms, China is steadily emerging as an important new player in world commerce. Trade with China makes up 5% of total world trade (Engholm 1994). China’s total foreign trade reached almost \$74 billion by 1986; by 1993, the figure had rocketed to \$158 billion and is estimated to reach \$293 billion by 1998. China purchased \$83 billion worth of goods from foreign suppliers in 1993; the figure is estimated to reach \$150

billion by 1998 (Engholm 1994). Thus, the immensity of the country and its rapidly growing economy provide a huge market for international investors, manufacturers, and other business people.

An increasing number of firms from the West now reap profits there, including H.J. Heinz, Avon Products, McCall's, Bausch & Lomb, and many others. For example, Avon projects its sales to China to increase rapidly from \$1.5 million in 1991 to \$1 billion annually in the near future (Engholm 1994). China has become the 14th largest export market for American products; U.S. exports to China reached \$9.3 billion in 1994 [Lawrence et al 1995(a)]. Chinese orders account for a large share of the overseas business of such American giants as airplane manufacturer Boeing and high-tech companies Motorola, AT&T, and IBM [Lawrence et al. 1995(b)]. Technical communication is an indispensable part of business relations and can greatly affect the success of businesses.

Clearly written product descriptions and user manuals with adequate information can increase the usability of the product and enhance its image as a quality product. This image will help sales and bring in more business. On the other hand, if poorly written, these documents can hinder usability and damage the image of the product and the company, which will certainly affect future business. This effect of technical communication, of course, applies to business both within a culture and across cultures.

However, in cross-cultural business, the effect of technical communication is enlarged because of cultural factors. An otherwise well-written proposal may fail to win a contract from the target readers of a different culture because the proposal writers are

unaware of certain cultural customs or expectations, thus unwittingly offending the readers. Even once a sale is done, the company may lose the chance of future business if the documents accompanying the product fail to take into account cultural factors. For example, the documents may be organized in a way different from the way users are used to with their different mode of thinking, thus making the documents difficult to process. In this case, users may question not only the quality of the documents but also that of the product, even the sincerity or competence of the company. The least consequence of such inadequate documents is raising costs, because the documents have to be redone, as is the case in Thrush's real-world example I described earlier. Therefore, understanding the target culture, especially its thinking mode and persuasive techniques, will help make the cross-cultural technical communication more effective and contribute to the success of the businesses.

Yet, despite the growing need for studying cross-cultural technical communication with respect to China, no such studies exist so far. No guidelines exist on how to communicate technical information to people of Chinese culture. The present study fills this void. It examines Chinese culture in terms of its mode of thinking and distinct persuasive techniques to achieve an understanding of the culture that will inform the cross-cultural technical communication. And it provides cross-cultural technical communicators with culture-specific guidelines based on the understanding. As the first one done to meet the need of the reality, this study is both necessary and valuable.

Review of the Literature

Timothy Weiss (1992) creates the metaphor “Ourselves among others” to describe the internationalism of business and technical communication in the 1990s. Weiss sees business and technical writing as “growing out of a need to ‘build bridges’ between ourselves and others” (23). Therefore, this metaphor “signifies that ‘bridge-building’ across differences will be the key in contexts becoming at once more heterogeneous and global” (23). “Ourselves among others” also suggests “the paradox of communication: a sharing, a constructed commonality, among our differences” (24). Although Weiss’ metaphor does not seem to have caught on, it is one valuable attempt, and so far the only attempt, to conceptualize international technical communication.

Lack of much theoretical study may be one of the characteristics of a new field, and international technical communication is a relatively new field. (Nearly all works were produced in the ’80s and ’90s, and most in the ’90s, to meet the needs of the fast growing international trade.) Consequently, despite the increasing need for its study, only relatively few works exist in this field. Those that do, however, reveal the true situation of the field: new but full of vitality.

The works are mainly newsletter essays and journal articles. Most authors are practitioners writing from their own observations and experiences, and they tend to address specific issues in a pragmatic way. There have been very few, if any, empirical investigations; conclusions are frequently suggestions or hypotheses that need further

study. In this section, I will review some of these works to provide a limited picture of this new field and discuss how the present study fits in the literature.

Generally, we can classify the existing literature on international technical communication into two categories according to author focus: globalization of technical documents and localization of technical documents. Authors who focus on globalization of technical documents look into elements involved in writing for an international audience, either an audience with a variety of cultural backgrounds or an audience in any culture different from that of the writer. Basically, globalizing technical documents means making the documents universal by eliminating culture-specific information and elements, including slang and culture-specific images and references. Globalization may be a preparatory step for localization. It is easier for a globalized document, a document without elements used or understood by the original culture only, to take on elements of the specific target culture.

Localization, on the other hand, means adapting the document to a specific culture, to its needs, its customs, and its mode of thinking, etc. Localization is not straight translation that renders the text from one language into another, although translation may be part of the localization process, and globalized documents can facilitate translation. Authors who focus on localization deal with issues involved in writing to a specific culture, such as the many cultural differences that impact the cross-cultural communication. Authors of both categories call readers' attention to the increasing need for international technical communication and to the impact culture has upon communication.

The articles address a variety of issues, including writing, graphic design, translation, managing the localization project, classroom instruction, and different cultures, which reveals the wide scope and complexity of the field. Most of the articles put forward suggestions for teaching technical writing or provide general guidelines for writing and designing for the particular audience addressed in the article.

Globalization of Technical Communication

Articles on globalization of technical communication touch upon all aspects of the globalization process, the process of preparing documents for an international audience. Topics range from document quality to project management, from language to document design, and from preparing a technical document for translation to educating writers of international technical documents.

The overall poor quality of technical documents accompanying products on the world market has aroused concern from cross-cultural technical communicators. Weymouth (1990), for example, points out that because of “error, oversight, and shoddiness in the language, printing, and graphics of technical documents in world trade,” consumers are often dissatisfied (143). He calls for a concerted effort by publication professionals and governments to establish quality standards and trade regulations for technical documents.

Most authors, on the other hand, direct their attention to the various aspects of the globalization process itself. Klein (1989) discusses the concept of globalization of documentation and the closely related concept of localization. Using Europe, “a common

market with crucial cultural differences,” as an illustration, he discusses how all the technicalities, such as laws, rules, regulations, and warranties, can be localized, or adapted to the specific country (159). He recommends a three-step approach to create translation versions in a cost-efficient way. The three steps are 1) identifying and marking text to remain in English in the translation; 2) inserting metric conversions; and 3) inserting individual, predefined, translated modules retrieved from the U.S. database.

On the other hand, Elaine Winters (1994) emphasizes that localization of technical products is not translation only. The cultural considerations must be a primary concern from the planning stage, and products for export should be developed “in parallel time with local versions” (7). Winters provides a top ten list for achieving localization success, with a focus on planning and coordinating the whole localization project. With its insight into managing localization projects, this article is especially useful for those who are new in the international market.

Similarly, in discussing how to prepare a product for international use, Landgren (1994) considers globalization a multi-step process. This process includes “identifying the target markets, understanding the requirements of those markets, and then designing, writing, and illustrating documents using techniques that facilitate translation into a foreign language” (3). Likewise, he provides general guidelines about designing, writing, and illustrating the international user information, as well as guidelines for choosing a translation specialist. This article supplements Winters’ article. Combined, the two articles provide a complete picture of the localization process and the issues and considerations involved in the process.

Yet another article on preparing technical documents for a foreign market is written by Nancy Rains (1994). Because her focus is on readying the language of the document for translation, she provides guidelines on very specific language points. For example, she cautions the writer to “verify that the antecedent for each pronoun is obvious” and “check the compound modifier phrases in the document” (12). She also has good advice on providing supporting documentation to the translator.

Along the same line, some authors recommend using Simplified English, a stylized international form with rigid rules, to write manuals for use in other countries (*Communications Concepts* 1994). This article reprints a series of rules for writers to follow in writing for readers of other nationalities. These rules are compiled by Sharon Stewart, a member of STC’s Silicon Valley chapter, based on her own experiences. At first glance, rules such as obeying all rules of grammar, using short sentences, using active voice, etc. are no different from the usual technical writing guidelines with which we are familiar. The point emphasizing these rules is that cross-cultural writers should consider their particular audience and take extra care about following those guidelines.

As a growing number of software products enters the world market, how to internationalize on-line information becomes a more and more important issue as well. To reduce cost, Merrill and Shanoski (1992) recommend designing on-line information with translation in mind to avoid costly redesign. They describe the various constraints that translation imposes on the design of on-line information, including space that is limited as translation expands, the on-line style that needs to be brief, and translators who

are often non-technically oriented. They suggest that writers and developers work closely to overcome these constraints.

Because the graphic language can be universal, yet can backfire if used carelessly, designing graphics for international documents also becomes a significant issue in cross-cultural technical communication. In his “The Almost Universal Language: Graphics for International Documents,” William Horton (1993) presents good advice on designing graphics for international documents. He recommends designing images shared by all so that the graphics are “independent of verbal language and of culture” (682). With many specific examples illustrating cultural differences or problems resulting from ignoring cultural differences, Horton’s discussion covers why and how writers should plan international graphics and what pitfalls to avoid.

The last two sections of Horton’s article are especially good. The *how* section addresses such significant issues as reading habits, artistic conventions and expectations, learning styles, and rhetorical preferences. Horton suggests some approaches to dealing with these cultural differences, such as “avoid extremes,” “maintain neutrality,” and “design multi-use graphics” (684). The *pitfalls* section touches upon initials and punctuation marks, puns and verbal analogies, mythological and religious symbols, animals, national emblems, colors, and people, thus calling readers’s attention to some of the areas they are most likely to make mistakes.

In discussing how to use well-designed graphics in multimedia instruction, Emery Deidre (1993) also includes a section on creating effective international graphics. He develops a checklist to help companies ensure the quality of their international products.

Questions to be asked in checking international message design include such specific ones as whether dates, addresses, and phone numbers employed are universally identifiable, whether there is enough room on each screen to support translation to other languages, and whether graphics reflect a global perspective instead of showing the United States as the center of the world.

A very comprehensive work on developing international user information is from Digital Equipment Corporation. Jones et al. (1992) describe Digital's International Product Model, which includes planning for localization; designing, writing, illustrating, and packaging international user information; preparing for translation; etc. The model focuses on modular design, use of templates, and collaboration of project leaders, product designers, technical writers, editors, illustrators, and translation coordinators. The goal is to produce international products, including the documentation accompanying them, that can be easily modified for sale worldwide. The book describes in detail how Digital achieves this goal by using the model, and it includes specific guidelines for all aspects of the model.

Some authors turn their attention from the real workplace to academia, thus creating a needed link. They discuss how the technical writing classroom can respond to the need for international technical communication. For example, in researching whether academic programs in technical communication meet the requirements of the workplace, Barclay et al. (1991) take into account the impact of international economy on technical communication. They contend that if academic programs are to achieve their goal of

preparing skilled technical communicators, these programs must reflect workplace culture, organization, and communications at the national and international levels.

Similarly, when discussing problems existing in the way technical writing is taught to nonnative speakers in the U.S. and abroad, Stevenson (1983) addresses the failure to introduce internationalism into the technical communication classroom. He points out that “international trade, multinational corporate structures, and the growth of electronic means of creating, transmitting, and storing technical information combine to make the potential audiences for many technical documents culturally very diverse” (325). Students, therefore, must be made aware that the documents they produce may be read by people who have different cultural backgrounds, hence different modes of expression, from their own.

Stevenson does not say how to approach the differences, but asserts that this awareness, along with experience with people of other cultures, can benefit instruction in technical communication. Thus, he implies that the understanding achieved from the experience can point out ways to deal with the differences, which is a view held by other authors as well.

Likewise, Thrush (1993) calls readers’ attention to the increasingly diverse workplace and its influence on technical communication. She discusses five factors that vary within languages and cultures and that may cause communication problems. They are “world experience, the amount of common knowledge shared within cultures, the structure of societies and the workplace, culturally specific rhetorical strategies, and cultural differences in processing graphics” (Thrush 1993, 74). Thrush contends that to

train technical writers of tomorrow, technical communication textbooks should incorporate international and multi-cultural communication. She suggests “a three-pronged approach” that includes raising awareness of the problem, introducing students to sources of information, and providing practice in communicating with people of other cultures (280).

Apart from implications for the technical communication curriculum, the five factors Thrush discusses are also valuable for researchers in cross-cultural technical communication study. Based on research in anthropology, cognitive psychology, linguistics, and writing theory, these cultural factors provide researchers a guideline as to what to look for and focus on among the huge amount of cultural elements vying for attention.

A distinct feature of these works on globalizing technical documentation is that almost every one of them puts forward some guidelines. Thus, there are guidelines on what elements to set aside for localization, on the type of English language used in the document, on how to create illustrations for the international audience, on managing the globalization project, etc. Nearly all these guidelines focus on eliminating culture-specific elements in the documents so that the documents are universalized and are easily transportable across cultures. There are no guidelines for how to adapt the document to the conventions and cognitive abilities of a specific culture.

Of course, the category of globalization has a different focus from that of localization, even though globalization may be a preparatory step for localization. It is the focus of the authors on localization to address the issue of adapting a technical

document to a specific culture. Yet, as we will see in the next section, articles on localization are mainly centered on examining the technical communication features of the specific culture under study. Although the results can inform localizing technical documentation for the culture, the authors usually fail to produce a set of practical guidelines that will provide clear guidance for cross-cultural technical communicators.

Localization of Technical Communication

Articles on localization of technical communication address specific cultures. Authors provide insights into the communication behavior of a specific culture and discuss cultural differences that may exert influence on the cross-cultural technical communication. Authors in this category include both foreign students and native scholars of the specific culture, which is usually characteristic of cross-cultural research.

As I have mentioned earlier, that specific culture has often been the Japanese culture. Although in 1993, Kohl et al. noted that technical communication involving Japan had received little study, saying, “The bulk of the literature on Japanese communication focuses on interpersonal and business communication rather than on technical communication” (63), the little study is already the most a specific culture has received so far in international technical communication. However, the few works represent a variety of types, showing the study of localization is both intriguing and robust.

Ethnographic study, although difficult to arrange and often expensive, is extremely valuable to the localization research. It contributes to understanding a culture

by exposing the communication behavior being actually practiced by the culture or its subculture. Haas and Funk (1989) did such an ethnographic study of communication in Japanese technical settings. In two separate work experiences in Japan, Haas and Funk observed how technical information is collected, assimilated, and transmitted in Japan. Their observations reveal that communication in Japanese technical settings is “immediate rather than delayed,” “consensual in nature,” and “spoken rather than written” (362). Consequently, Haas and Funk characterize communication in Japanese technical settings as “shared information” (362).

Other researchers seek to identify and explain the technical communication features of a culture through its language and culture. Kohl et al. (1993) identify ambiguity as the distinct characteristic of the Japanese language, arising partly from a cultural preference for indirectness and partly from the fact that Japanese is a contextual language. They see this ambiguity as a contributing factor toward many aspects of Japanese communication revealed by the results of a survey they conducted of American and Japanese aerospace engineers and scientists. These aspects include “greater reliance on oral small-group communication” and “greater emphasis on visual communication” (65).

Language and cultural values represent the core elements of a culture. They can throw light on the many otherwise inexplicable behaviors and practices of a culture. They are therefore important elements in the research of cross-cultural technical communication. Language and cultural values will also have an important role in my present study.

Truth often takes several perspectives to discover. Studies that have a cross-cultural nature especially need contributions from both foreign scholars, who are the outsiders, and native scholars, who are the insiders of the culture. The article of Haneda and Shima (1982) underscores this point. Writing as native Japanese scholars, they address the general view that Japanese communication is ambiguous and unpredictable. These authors explain the thinking and feeling behind the letters Japanese write. They hope that their discussion can enable foreign businessmen to “avoid making a mistake of taking modesty for inability, respect for lack of friendly feelings, politeness for a downright lie, etc.” (20).

An article more closely related to the day-to-day localization issues is written by John Mackin (1989). Mackin discusses the differences between Japanese and English in terms of structure and presentation and the problems likely to occur in translated versions of Japanese or English technical documents. He recommends good translation editing, as well as good technical writing and editing, as the means to surmount the barrier between Japanese and English technical documents. As somebody whose everyday work is localizing technical documents, Mackin brings into the field his first-hand experiences and provides some practical guidelines that will help others solve similar translation problems.

Finally, Kyoko Matsui (1989) examines Japanese technical communication from the perspective of a native Japanese educated in document design in the U.S. and working as a technical writer in Japan. She describes how the general lack of a good understanding of technical writing and document design creates problems in the

relationships between Japanese technical writers and their clients. She underscores mutual understanding and education and training in technical communication as some of the ways to solve the problems.

While there are a few articles dealing with technical communication in other countries, such as the Netherlands (Jansen 1994) and Australia (Fisher 1994), there has not been a single study dealing with localization of technical communication involving Chinese culture. Perhaps largely because China was closed to the world for so long, hence no demand arose for such study, even study in Chinese business communication has been limited. Works on international business communication may touch upon China. In discussing using cultural conventions to inform business correspondence, for example, Boiarsky (1992) mentions Asian culture along with Western European and Latin American cultures. She talks about the “Asian custom of developing trust prior to engaging in business” and uses both Japan and China as an example (556). She cautions that Americans may fail to acquire a contract if they do not reflect this approach in their business, a point made often by writers on international business communication.

However, except for several business guides that appeared in the 1980s (Wik 1984; DeMente 1989; Seligman 1989), I found only two articles that deal specifically with business communication in China (Zong and Hildebrandt 1983; Halpern 1983). And both are about the teaching of business communication in Chinese colleges.

Such lack of study in cross-cultural technical communication with respect to China is not in keeping with the increasingly significant role China is playing in world

trade, as I have shown in the previous section. The present study meets the need of this situation.

The present study belongs to the localization category in the literature of international technical communication. While it is similar to some of the studies reviewed above, especially in the sense that it also recommends guidelines, this study is unique in several ways.

First, it is the first study dealing with communicating technical information to readers of Chinese culture. And it lays a foundation for further study.

Second, while “many cross-cultural studies of communication describe foreign communication patterns and then compare them to those of North America, rarely going beneath the surface to explore the source of such differences” (Yum 1991, 66), this study “goes beneath the surface.” Recognizing that thinking is the fundamental basis of information processing and that information processing is the key in any communication, this study examines the general mode of thinking of the Chinese as revealed in various aspects of Chinese culture. It also examines a distinctive feature of Chinese persuasion and suggests persuasive strategies for cross-cultural technical communicators.

Third, existing studies generally take the approach of emphasizing differences between cultures and then suggesting ways to avoid producing undesirable consequences out of ignorance of the cultural differences. This study takes a different approach based on the belief that active adaptation is more effective than passive avoidance. It provides a profound understanding of Chinese culture in terms of thinking and persuasion, then

suggests ways to adapt the technical documents to the cognitive features and capabilities of the Chinese reader.

Fourth, the general guidelines provided in the study are based on the understanding of Chinese culture in terms of thinking and persuasion, two fundamental elements related to technical communication. With the same understanding, readers can develop additional guidelines to address issues arising in the localization process. Moreover, the study also uses specific examples to illustrate how the guidelines can be applied.

Fifth, in examining the typical Chinese thinking and persuasion to inform cross-cultural technical communication, the study analyzes several cultural aspects, thereby offering a fresh perspective at these aspects as well.

In light of these features, the present study does more than meet the increasing need for localization research involving Chinese culture and provide culture-specific guidelines. With its unique approach, it will also contribute greatly to the study of international technical communication and to the study of Chinese culture as a whole.

Scope, Audience, Definitions

This section defines the scope and audience of the study and explains two terms that I use with a specific meaning and that appear frequently in the dissertation.

Scope

This study is focused on written technical communication rather than interpersonal communication, on essential elements involved in the communication such as thinking and persuasion, rather than superficial phenomena indicating cultural differences. It deals with how cross-cultural technical communicators can adapt their technical documents for more effective communication with their readers of the Chinese cultural background.

Because I believe that cultural traditions have a much more fundamental and lasting influence upon the people of a culture, especially their mode of thinking, than any political ideologies, my discussion of the influence and rationales is limited only to those based on culture and tradition.

Audience

The primary audience of this dissertation includes English-speaking cross-cultural technical communicators preparing documents for readers of the Chinese cultural background. I assume that these technical communicators are already aware of the essential technical writing and document design principles, such as audience analysis, reader-centeredness, functions of visuals, use of white space, and etc. Therefore, what they are interested in is how to adapt an English technical document to readers of the Chinese cultural background.

The secondary audience includes researchers in the field of international technical communication, and both students and practitioners of Chinese technical communication.

Definitions

The Chinese--This term refers to people of the Chinese cultural background. In other words, it includes all the Chinese in China's "Three Dragons," Mainland China, Hong Kong, and Taiwan, which form the so-called "Greater China" (Engholm 1994, 3). The reason is that despite the many differences existing among these "Three Dragons," they are all born of and belong to the same traditional culture. All the Chinese of "Greater China" read and write the same Chinese language, even though they speak many different dialects, and they are all influenced by the traditional values from Confucianism, Taoism, and Buddhism. Therefore, although many examples I use are about the Mainland Chinese, (because, as a Mainland Chinese myself, I am more familiar with Mainland China), a much wider application can be made of what I discuss about the Chinese in the dissertation. The adjective "Chinese" and the noun phrase "Chinese culture" take on this broader meaning as well.

Cross-cultural technical communicator--In the rest of the dissertation, this phrase refers specifically to those English-speaking technical communicators in the West creating documents for an audience of the Chinese cultural background. They are part of the primary audience of this dissertation.

Chapter Preview

The rest of the dissertation consists of four chapters. Chapters 2 and 3 provide an understanding of Chinese culture in relation to technical communication. Then, based on

the understanding achieved from these two chapters, Chapter 4 presents guidelines for creating technical documents for the Chinese with explanations and illustrative examples. Chapter 5 concludes the whole dissertation. This section outlines these chapters briefly.

Chapter 2, The Chinese Mode of Thinking. Thinking is the fundamental basis of information processing, and information processing is a crucial part of technical communication. Consequently, this chapter demonstrates how the Chinese typically think in a holistic and relational way. Although it is well known that people in the East think holistically, nobody has ever demonstrated how they do so. This chapter demonstrates this distinctive feature through a brief examination of five aspects of Chinese culture: 1) Chinese systems of thought, which include Confucianism and Taoism; 2) Chinese outlook of the world as represented by the *Yin-Yang* principle; 3) Chinese language, which includes Chinese characters, compound expressions, and Chinese syntax; 4) Chinese artistic life as represented by the landscape painting; and 5) the contemporary model life of Lei Feng, which represents the contemporary social morality. This demonstration provides not only a concrete idea of Chinese holistic and relational thinking, but also a very good picture of the Chinese language and culture. In the chapter, I also discuss the implications such a thinking mode may have for technical communication.

Chapter 3. Analogy as a Significant Element in Chinese Persuasion. Because technical communication is persuasive communication, this chapter examines the use of analogy as a distinctive feature of Chinese persuasion. In the chapter, I first discuss why the Chinese rely heavily on analogy in their persuasion. Then, by analyzing a few classic

examples, I provide the audience with a more concrete idea about how the Chinese use analogy to persuade. I also briefly discuss implications of this distinctive feature of Chinese persuasion for the cross-cultural technical communicator.

Chapter 4. Recommendations for Creating Technical Documents for the Chinese. This chapter presents six practical guidelines based on the understanding gained from the previous two chapters. For each of these culturally-related guidelines, I explain the rationale and illustrate its application with an on-going example.

Chapter 5. Conclusion. This chapter concludes the dissertation and presents suggestions for further research.

CHAPTER 2

CHINESE MODE OF THINKING

Thinking is the fundamental basis of any information processing, and information processing is a crucial part of technical communication. The Chinese have a distinctive mode of thinking that is different from the typical western thinking mode. Cross-cultural technical communicators not only need to be aware of this difference but also need to have a good understanding of the typical Chinese mode of thinking. This good understanding will enable them to adapt documents to the cognitive habits and capabilities of their Chinese readers, thereby helping these readers to process technical information better.

It has become almost common knowledge that people in the East have a different mode of thinking from those in the West. Scholars in intercultural communication, especially, are aware of this difference. For example, Saral (1979) bases his consciousness theory of intercultural communication on the difference between the Western tradition that “emphasizes individual rational thinking and linear reasoning” (78) and the Eastern one that is “neither dissociative nor a linear work of syllogistic reasoning, but one of unitive thinking, of intuitively appreciating the commonality of events and objects by subjectively experiencing, with the whole body, oneself as necessarily

connected with an environment and the universe” (79). In other words, Western thinking is linear and analytical, whereas Eastern thinking is holistic and relational.

Likewise, when discussing theoretical directions for intercultural communication, Howell (1979) also recognizes the difference between the Western “either-or, true-false Aristotelian thinking” and the Eastern “holistic data processing,” and he suggests combining these two (38). In discussing cultural thought patterns in intercultural education, Robert Kaplan (1966) also states, “The thought patterns which speakers and readers of English appear to expect as an integral part of their communication is a sequence that is dominantly linear in its development” (1). What is implied here is that non-English speakers and readers may expect a different thought pattern.

Consistent with the common knowledge, scholars of Chinese culture have also referred to holistic and relational thinking as a distinctive feature of Chinese culture (e.g., Cheng 1971; Chu Y. 1973; Uritan 1975; Chu C. 1978; Hansen 1992). However, so far, no work specifically discusses the holistic and relational thinking of Chinese culture, and no work demonstrates how the Chinese think holistically and relationally. It is as if the conclusion is so evident that there is no need for further proof or illustration.

However, for cross-cultural technical communicators writing for the Chinese, knowing that their target readers think differently from them in a holistic and relational way is not sufficient. They need to know how and, if possible, why they do so. Only when they have a more concrete idea of this distinctive feature of Chinese culture can they really understand their Chinese readers and adapt their writing effectively to them.

This chapter, therefore, demonstrates the Chinese relational and holistic mode of thinking by discussing several aspects of Chinese culture.

A mode of thinking is the regularities underlying certain phenomena. It is not directly visible by itself. We have to uncover a mode of thinking by examining the phenomena that embody it. The typical mode of thinking of a culture is embodied in the phenomena of thought and behavior of this culture. As it is impossible to look at all the thoughts and behavior of a culture, in this chapter, I will examine five aspects of Chinese culture to demonstrate the typical Chinese mode of thinking. The five aspects can be divided into three groups: Chinese systems of thought, Chinese language, and Chinese life. I will discuss each of these aspects in a separate section. Here, I will first explain briefly why I choose these particular aspects.

A system of thought is the systematized ideas about human beings or the universe. It most clearly demonstrates a mode of thinking because it is the particular mode of thinking that determines the systemization of the ideas (Li 1986). Although numerous systems of thought have influenced Chinese culture, I will discuss only Confucianism, Taoism, and the *Yin-Yang* principle. Confucianism and Taoism are the two native-born Chinese systems of thought. The *Yin-Yang* principle is the root of all the traditional Chinese views of the universe. These three systems of thought have influenced Chinese culture for thousands of years.

Language is the vehicle of thought, and it both influences and is influenced by the thinking of its users. Consequently, it is another important element that reveals a culture's mode of thinking. The Chinese language has been called "a congenial medium

for relational thinking” (Chu Y.1973, 599): One section in the chapter, therefore, will examine how the typical Chinese mode of thinking is revealed in the Chinese language.

A mode of thinking is not only reflected in systems of thought and the language, but also in the life of the people. As examples of this cultural aspect, I will discuss the Chinese artistic life, as illustrated by Chinese landscape painting, and a model life set up for the contemporary Chinese to emulate, the life of Lei Feng. Painters depict the world as they see it, and how they see it is based on their thinking. Therefore, the typical Chinese mode of thinking is also revealed in the typical Chinese painting.

The Lei Feng model represents the contemporary moral standards. Whereas the terms used are different from those of the traditional Confucian ethics, the moral standards implied and the underlying thinking mode remain the same. The primary purpose of this example is to show that while the various cultural phenomena may change over time and appear varied and colorful, the underlying mode of thinking remain the same.

These few cultural aspects may not provide a complete picture of Chinese culture, but they will very well demonstrate the typical mode of thinking of the Chinese people. Combined, they will provide a very concrete idea of how the Chinese think in a holistic and relational way. In the last section of this chapter, I will briefly discuss the implications such a thinking mode has for cross-cultural technical communicators. Chapter 4 will address this topic in greater detail.

Chinese Systems of Thought and Relational/Holistic Thinking

Although a system of thought is not the same as any mode of thinking, a system of thought can reflect a mode of thinking, for a mode of thinking can be represented by the thinking pattern underlying the system of thought. The thinking patterns of Confucianism and Taoism well demonstrate the thinking mode of the Chinese people, because these two native Chinese systems of thought have influenced the Chinese people for thousands of years. Although China has undergone numerous changes of dynasties and fusions of races, Confucianism and Taoism have always remained as the ideology of the culture, as the spiritual pillar of the Chinese people.

Besides, Confucianism and Taoism are two different but complementary systems. Most Chinese schools of thought over the 2,500 years can be categorized into these two systems. They are either Confucian or Taoist, or both. This phenomenon is by no means accidental. These two systems of thought embody the kernel thinking of the Chinese people, that is, the holistic and relational mode of thinking. This kernel thinking affords the two systems great compatibility, making them transcend the restrictions of time. This thinking sinks into the minds of the Chinese people through the Confucian and Taoist systems of thought, with or without the people's consciousness, controlling their thought and behavior. Consequently, analyzing the underlying thinking mode of Confucianism and Taoism is a good starting point toward understanding the thinking mode of the Chinese people.

Before I move on to look at Confucianism and Taoism, I would like to point out that I am not conducting a historical study of any philosophy or streams of thought. I am only using the materials and fruits of earlier studies to demonstrate a thinking mode. Consequently, proving and criticizing the historical materials is beyond the scope of this section.

Confucianism and Relational/Holistic Thinking

Confucianism is named after its founder--Confucius, who lived in the fifth century B. C. But Confucianism is not limited only to the thought of Confucius. It is a huge system of thought, consisting of all the ideas and views of this school accumulated over a period of 2,500 years. In other words, Confucianism is “a consistent pattern of ideas attributed to one ancient sage” (Fairbank 1979, 54). In this section, I will look at the fundamental ideas of Confucianism, recognize its characteristics or its unique points that distinguish it from Taoism, the other dominant native Chinese system of thought, and through these characteristics, to uncover the underlying mode of thinking of the Chinese people.

During its hundreds of years of development in the Chinese history, Confucianism did not remain unchanged. Different periods had different representatives. In the same period there was disagreement within the school or there were branches with different ideas. However, considered as a whole, the fundamental ideas of Confucianism have remained the same. There was more integration among the various branches than

disagreement. More importantly, the mode of thinking that runs through the Confucian system of thought has always remained consistent.

One reason the Chinese people have respected Confucianism for over 2,500 years is that Confucianism respects popular values the Chinese have cherished for ages. Consequently, “it is not so much that China is Confucian, as that Confucius is Chinese” (McNaughton 1974, 16). The concern of Confucianism is human life and human society. All Confucian thinkers, from Confucius himself to the Confucian representatives of every later generation, focus on the subject of humans, on people of life and blood who live in actual reality. They usually do not speak of “the other life.” As Arthur Waley notes in his annotation to *The Analects of Confucius*, “The Tao taught by Confucius only concerned human behavior (‘the Ways of man’); he did not expound a corresponding Heavenly Tao, governing the conduct of unseen powers and divinities” (110).

This focus on people and “this life,” is clearly demonstrated by the following story recorded in *The Confucian Analects*:

Chi Lu asked about serving the spirits of the dead. The Master said, “While you are not able to serve men, how can you serve their spirits?” Chi Lu added, “I venture to ask about death?” He was answered, “While you do not know life, how can you know about death?” (Legge[a] 1960, 240)

This Confucian tradition has exerted great influence upon the Chinese. For hundreds of years, the Chinese have followed this Confucian teaching, always focusing their attention on the real present life, on real life activities. It is largely because this idea has rooted so deeply in the Chinese mind that no religion has ever been able to become a

major ideology in China (Fan 1963), and that the Chinese people have little sense of religion (Jian 1983).

Confucian thinkers hold a unique view of human beings. They do not look upon humans as independent individuals, nor do they consider them from a biological point of view. They place human beings in the big background of the whole human society and view them as existing in various relationships. In *The Doctrine of the Mean*, Confucius says:

The duties are those between sovereign and minister, between father and son, between husband and wife, between elder brother and younger, and those belonging to the intercourse of friends. Those five are the duties of universal obligation. (Legge[a] 1960, 405)

A human being is the sum total of all these relationships. They play all kinds of roles in this world. Relative to their parents, they are sons or daughters; to their children, they are fathers or mothers; to their brother and sister, they are brothers or sisters; to other members of the society, they may be friends; to the king, they are subjects. There is no separate abstract human being. Whether willingly or unwillingly, in actuality, a human being always exists amidst such relationships.

It is because humans exist in these relationships that Confucianists believe that the standard of an ideal society is the harmony of all these relationships. *The Analects* records:

The duke Ching, of Chi, asked Confucius about government. Confucius replied, "There is government, when the prince is prince, and

the minister is minister; when the father is father, and the son is son.”
(Legge[a] 1960, 256)

Mencius, whose position in the history of Confucianism is next only to Confucius, depicted the ideal society in a similar way:

. . . between father and son, there should be affection; between sovereign and minister, righteousness; between husband and wife, attention to their separate functions; between old and young, a proper order; and between friends, fidelity. (Legge[b] 1960, 252)

A person plays multiple roles, and from these multiple roles arise rights and duties. If people all execute their rights and duties correctly, relationships among them will become harmonious, and the harmonious relationships will result in a peaceful, orderly society. This belief is the social ideal of Confucian thinkers.

We can see in the Confucian definition of a human being a holistic, relational mode of thinking. A human being is never regarded as an isolated individual. For the Confucianists, an isolated individual is meaningless. The individual exists as a part of the whole and in organic relationships with all other parts making up the whole. The Confucianists would not understand what you are talking about if you speak of an individual without the related whole.

This holistic, relational thinking mode runs throughout the Confucian system of thought. For the Confucianists, one's ideal of life and meaning of living lie in one's very efforts to achieve the highest possible harmony for one's personal relationships and for

the whole kingdom. The following passage from *The Great Learning*, one of the Confucian classics, is a good representation of basic Confucian teachings:

The ancients who wished to manifest their clear character to the world would first bring order to their states. Those who wished to bring order to their states would first regulate their families. Those who wished to regulate their families would first cultivate their personal lives. Those who wished to cultivate their personal lives would first rectify their minds. Those who wished to rectify their minds would first make their wills sincere. Those who wished to make their wills sincere would first extend their knowledge. The extension of knowledge consists in the investigation of things. When things are investigated, knowledge is extended; when knowledge is extended, the will becomes sincere; when the will is sincere, the mind is rectified; when the mind is rectified, the personal life is cultivated; when the personal life is cultivated, the family will be regulated; when the family is regulated, the state will be in order; and when the state is in order, there will be peace throughout the kingdom. (Chan, 33)

From the Son of Heaven down to the mass of the people, all must consider the cultivation of the person the root of everything besides. It cannot be, when the root is neglected, that what should spring from it will be well ordered. It never has been the case that what was of great importance has been slightly cared for, and, at the same time, that what was of slight importance has been greatly cared for. (Legge[a] 1960, 357-359)

From this passage, we can see that the ultimate goal for the Confucianists is to achieve tranquillity and happiness for the whole kingdom. But the whole kingdom's tranquillity and happiness is based on the states being rightly governed, and the state being rightly governed is based on the families being regulated, which is in turn based on

the persons being cultivated. Here we can clearly see a relationship of the individual and the whole, of the big and the small. The whole, the tranquillity and happiness for the whole kingdom, is the ultimate goal. Whatever one does, one needs to keep this ultimate goal in mind. The achievement of this ultimate goal is based on the achievement of a series of individual goals at an increasingly lower level, from the state to the family to the individual. Each lower level goal is achieved for the high one; without the higher level goal, the lower level goal is meaningless. Such thinking is the holistic thinking of the Chinese people.

The teachings about how to move from personal cultivation to tranquillity and happiness for the whole kingdom are a key point in Confucianism, which is also a point best revealing the relational thinking mode of the Chinese. Mencius provided us with the well-known elucidation of this point as is shown in the following passage:

Treat with the reverence due to age the elders in your own family, so that the elders in the families of others shall be similarly treated; treat with the care due to the young in your own family, so that the young in the families of others shall be similarly treated:--Do this, and the kingdom may be made to go round in your palm. (Legge[b] 1960, 143-144)

The teaching here is to extend established facts to other things. One extends one's reverence for one's own elders, care for one's own children, and love for one's own brothers and sisters to the elders, children, and brothers and sisters of others. The reasoning is that if you revere your elders, care for your children, love your brothers and sisters, you will be able to revere, care for, and love the elders, kids, and brothers and

sisters of other families. Here is no usual logical process or premises involved; the conclusion is reached directly.

Otherwise, if we use the usual logic, the reasoning will go as follows: I love my parents, my children, my brothers and sisters. You love your parents, your children, your brothers and sisters. He loves his parents, his children, his brothers and sisters. I, you, and he are human. Therefore, humans love their own parents, their own children, and their own brothers and sisters. The moral we may draw from this reasoning is at most: if you are human, you should love your own parents, children, and brothers and sisters. By this line of reasoning, we cannot arrive at the conclusion that if you love your own parents, children, and brothers and sisters, you will love the parents, children, and brothers and sisters of others as well.

However, in the Confucian system of thought this conclusion is regarded as right and proper. Confucianism does not use logical reasoning. Syllogistic logic is not a traditional pattern of thinking for Chinese people. The Chinese follow a holistic and relational thinking mode, and we may therefore easily understand Mencius' reasoning from the perspective of holistic and relational thinking.

Things are related by their similarity. Therefore, all similar things are related; and similar things can be treated similarly. Because the elders in my family are similar to the elders in your family; my children are similar to your children, I can treat them all in a similar way. The key is to identify similarities among things; once the similarities are found, the method to treat them is found as well.

We may regard recognizing similarities existing among things as a key to the Chinese way of cognition. It is said in *The Great Learning*:

. . . the intelligent mind of man is certainly formed to know, and there is not a single thing in which its principles do not inhere. But so long as all principles are not investigated, man's knowledge is incomplete. On this account, the learning for adults, at the outset of the lessons, instructs the learner, in regard to all things in the world, to proceed from what knowledge he has of their principles, and pursue his investigation of them, till he reaches the extreme point. After exerting himself in this way for a long time, he will suddenly find himself possessed of a wide and far-reaching penetration. Then, the qualities of all things, whether external or internal, the subtle or the coarse, will all be apprehended, and the mind, in its entire substance and its relations to things, will be perfectly intelligent. This is called the investigation of things. This is called the perfection of knowledge. (Legge[a] 1960, 365-366)

In other words, the Confucian way of cognition is to proceed from the principles of what is known and follow the principle of similarity to investigate the various relations between the known and the unknown, and thereby, achieve a complete understanding of the unknown.

So far, we can see that Confucianists recognize two types of holistic relations among things, the coordinating relation and the subordinating relation. The coordinating relation is based on similarity among parallel things, like the similarity between my parents and your parents, or my children and your children. To this category belong the well-known Confucian sayings,

Do not do to others as you would not wish done to yourself,
(Legge[a] 1960, 251)

and

The man of perfect virtue, wishing to be established himself, seeks also to establish others; wishing to be enlarged himself, he seeks also to enlarge others. To be able to judge of others by what is nigh in ourselves;--this may be called the art of virtue. (Legge[a] 1960, 194)

On the other hand, the Confucian model of an ideal life--cultivate the personal life, regulate the family, order well the state, and bring peace to the whole kingdom--is a typical example representing the subordinating relation. All four actions possess the same intention, the good human nature. Confucianists generally believe in the essential goodness of human nature. Confucius said, "By nature, men are nearly alike; by practice, they get to be wide apart" (Legge[a] 1960, 318). Mencius explained further:

The feeling of commiseration belongs to all men; so does that of shame and dislike; and that of reverence and respect; and that of approving and disapproving. The feeling of commiseration implies the principle of benevolence; that of shame and dislike, the principle of righteousness; that of reverence and respect, the principle of propriety; and that of approving and disapproving, the principle of knowledge. Benevolence, righteousness, propriety, and knowledge are not infused into us from without. We are certainly furnished with them. And a different view is simply owing to want of reflection. (Legge[b] 1960, 402)

According to Mencius, benevolence, righteousness, propriety, and knowledge are the essential elements of human nature required for regulating the family, ordering well the

state, and bringing peace to the whole kingdom. These elements are part of human nature. People are born with them, but frequently, in their later life, tempted by various interests, people fail to further develop their good nature. Consequently, Mencius said, “The great end of learning is nothing else but to seek for the lost mind” (Legge[b] 1960, 414).

To cultivate the personal life means to restore and develop further one’s good nature. Those who are successful in doing this can regulate their families, because the family is the extension of an individual. In the family, benevolence, righteousness, propriety, and knowledge are reflected in filial piety for parents, love for sibling, and care for children. Only those who are successful in regulating their families can order well the state, because the state is the extension of the family.

Interestingly, in the Chinese language, the meaning for country (國家) is habitually expressed by a phrase composed of two characters, one for country (國) and the other for family (家). According to Chinese historians, when the ancient China became a civilized society, it kept many of the characteristics of a clan society, especially the social structure based on blood relationships (Hou 1982; Li Y. 1979; Li Z. 1986). Consequently, the state is truly the extension of a clan. The king of a state resembles the head of a clan; the ethic principles applied in the family are equally applicable to the relationship of the king and his subjects. The king should be benevolent, awe-inspiring, yet lenient to his subjects, whereas the subjects should show respect, love, and loyalty for the king. Only those who are successful in ordering the state can bring peace to the whole kingdom, because the kingdom is the extension of the state.

The family, the state, and the whole kingdom have the same intension, but an increasingly larger extension. All of them depend on the cultivation of the personal life. These related elements subordinate to one another, and they are linked by their similarities. None of the links can be missing; the ultimate goal--bringing peace to the whole kingdom--can be achieved only after the personal life is cultivated, the family regulated, and the state well ordered.

Thus, unlike things with a coordinating relationship, the things with a subordinating relationship have relations of big and small, earlier and later, and dependency. Yet, with both relationships, the element linking things together is the same. It is the similarity existing among these things. Because of this similarity, things big and small, like the kingdom, the state, the family, and the individual, become related, and the individual sees practical steps toward achieving the ultimate goal, which is, in this case, to bring peace to the whole kingdom. The graphic on the next page (Figure 2-1) depicts the model of an ideal society created on the basis of these relationships.

The few topics discussed here represent only a very small, but typical, portion of the Confucian system of thought. However, the thinking mode exposed from them, that is, using the principle of similarity to relate things, both coordinately and subordinately, to create a picture of a unified, organic, and related world, underlies the whole Confucian system of thought.

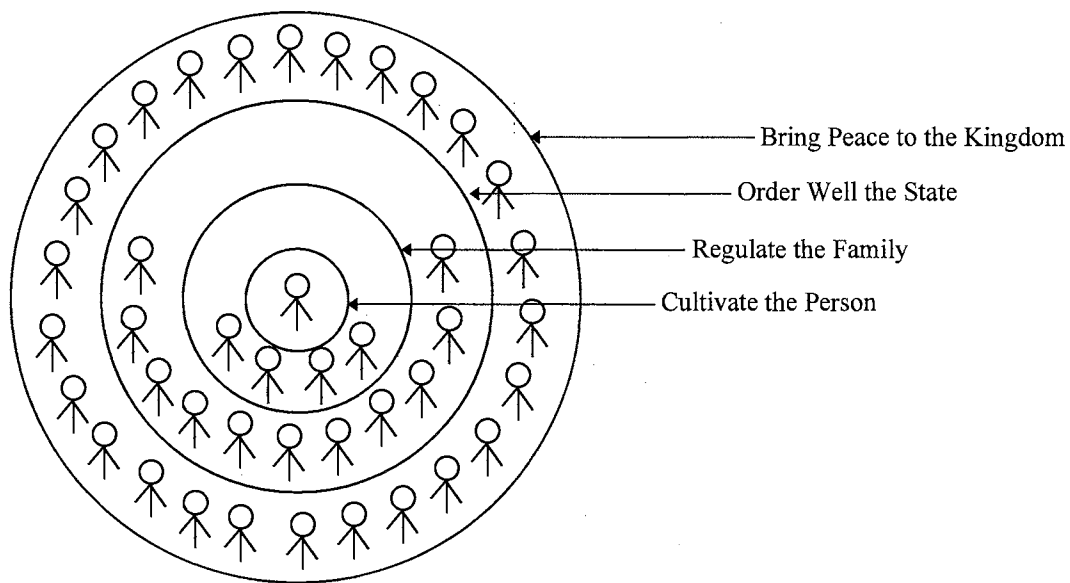


Figure 2-1. The Confucian model of how an ideal society can be created.

Taoism and Relational/Holistic Thinking

The founding father of Taoism is Laotse (born about 570 B.C.), a contemporary of Confucius. Laotse was older than Confucius in age, and according to Chuang Tzu (365-290 B.C.), the brilliant Taoist writer, Confucius had sought advice from Laotse (Watson, 1968). As one of the two native Chinese systems of thought, Taoism has had as much influence upon the Chinese as Confucianism.

A person who has just begun to learn about Chinese culture may find that Taoism is completely opposite to Confucianism. Confucianism teaches that one should actively participate in politics and try to achieve the ambition of ordering the state and bringing peace to the kingdom, whereas Taoism says that one should follow the course of nature in everything, not do anything against nature. Confucianism advocates a social order where “the prince is prince, and the minister is minister; the father is father, and the son is son”

(Legge[a] 1960, 256); whereas Taoism believes that the only reasonable order is a natural order; any man-made principles are senseless. Confucianism holds up the good kings and princes of antiquity as models for people to emulate; whereas Taoism laughs at these models because they are set up based on man-made principles, not Tao.

However, for the Chinese, these two apparently opposing systems of thought are not really opposite to each other. On the contrary, the Chinese think that Confucianism and Taoism are complementary. An ideal Chinese personality is composed of a Taoist half and a Confucian half. The Chinese believe in the maxim from Mencius, “if poor, attend to your own virtue in solitude; if advanced to dignity, make the whole kingdom virtuous as well” (Legge[b] 1960, 453). The former part of the maxim is the Taoist attitude to life, whereas the latter is the Confucian attitude to life. In the rest of the section, I will briefly outline the major ideas of Taoism and demonstrate how the Chinese combine Taoism and Confucianism. My emphasis will still be on the thinking mode thus revealed.

In his article, “Formation of Laotse’s Philosophy,” Chen (1988) introduces Laotse this way:

Chinese philosophy has always focused more on the problems of life and politics. Discussion of these problems centers further upon ethics and morals. Consequently, the scope of thought is often restricted to certain patterns. The uniqueness of Laotse’s philosophy lies in its expanded scope of thought. It extends the scope from human life to the whole universe. Laotse always looked at the various problems of human life from a macroscopic standpoint. At the same time, he was able to examine these same problems microscopically from multiple aspects. (1)

Indeed, compared with Confucianism, Taoism speaks more of ontology. However, the purpose is not to study the nature of being. Human life is still the focal point of Taoism. Only Taoism extends the scope of thought from human life to the universe and incorporates the world of humans into the larger world of the universe.

As far as the thinking mode is concerned, Taoism is still holistic and relational. But relative to the Confucian whole, the Taoist whole is much enlarged. The Confucian whole is human society. Confucianists regard an individual as part of the human society, bearing all kinds of social relationships. For Taoists, this view is much too narrow. Taoism regards an individual as part of the whole universe, in relation to every other thing in the universe. Taoism frees people from the Confucian responsibilities--cultivate the person, regulate the family, order the state, and bring peace to the whole kingdom--and believes that humans are under the influence of Nature, just like everything else in the universe.

In "The Great and Venerable Teacher," Chuang Tzu says:

Life and death are fated--constant as the succession of dark and dawn, a matter of Heaven. There are some things which man can do nothing about--all are a matter of the nature of creatures. If a man is willing to regard Heaven as a father and to love it, then how much more should he be willing to do for that which is even greater! If he is willing to regard the ruler as superior to himself and to die for him, then how much more should he be willing to do for the Truth!

. . . The great Clod burdens me with form, labors me with life, eases me in old age, and rests me in death. So if I think well of my life, for the same reason I must think well of my death.

You hide your boat in the ravine and your fish net in the swamp

and tell yourself that they will be safe. But in the middle of the night a strong man shoulders them and carries them off, and in your stupidity you don't know why it happened. You think you do right to hide little things in big ones, and yet they get away from you. But if you were to hide the world in the world, so that nothing could get away, this would be the final reality of the constancy of things.

You have had the audacity to take on human form and you are delighted. But the human form has ten thousand changes that never come to an end. Your joys, then, must be uncountable. Therefore, the sage wanders in the realm where things cannot get away from him, and all are preserved. He delights in early death; he delights in old age; he delights in the beginning, he delights in the end. If he can serve as a model for men, how much more so that which the ten thousand things are tied to and all changes alike wait upon! (Watson 1968, 80-81)

Human beings are not special favorites with either Heaven or Nature. Life is but one form Nature takes in its changing course. It is like hundreds of small creeks that flow into big rivers and finally into seas and oceans. Consequently, we do not need to feel great joy for a life born, nor do we need to feel great sorrow for a life lost. Life comes from the whole and returns to the whole, and this whole is Tao.

Tao is indescribable with words. As Laotse says, "The Tao that can be told of is not the Absolute Tao" (Lin 1948, 41). Laotse depicts Tao in the following passage:

Before the Heaven and Earth existed, there was something nebulous: silent, isolated, standing alone, changing not, eternally revolving without fail, worthy to be the Mother of All Things. I do not know its name and address it as Tao. (Lin 1948, 145)

For Chuang Tzu, Tao is felt as follows:

The Way has its reality and its signs but is without action or form. You can hand it down but you cannot receive it; you can get it but you cannot see it. It is its own source, its own root. Before Heaven and earth existed it was there, firm from ancient times. It gave spirituality to the spirits and to God; it gave birth to Heaven and to earth. It exists beyond the highest point, and yet you cannot call it lofty; it exists beneath the limit of the six directions, and yet you cannot call it deep. It was born before Heaven and earth, and yet you cannot say it has been there for long; it is earlier than the earliest time, and yet you cannot call it old. (Watson 1968, 81)

Basically, Tao is the origin and end of all forms of life in the universe. Taoism speaks of everything in relation to this whole. Naturally, humans are not isolated entities. They are the products of the workings of Tao. Although Tao is abstract, metaphysical, people can feel it. When people follow Nature, they follow Tao. Laotse describes the relationship of Tao and humans as follows:

Tao is great, the Heaven is great, the Earth is great, Man is also great. These are the Great Four in the universe, and Man is one of them. Man models himself after the Earth; the Earth models itself after Heaven; the Heaven models itself after Tao; Tao models itself after Nature. (Lin 1948, 145)

The Taoist thinking and reasoning, as reflected in this passage, are similar to those reflected in the Confucian ideal--cultivate the person, regulate the family, order well the state, and bring peace to the whole kingdom. Both Taoist and Confucian thinking and

reasoning follow the principle of developing from the small to the large and from the lower level to the higher level.

However, in the huge Taoist whole people transcend the various restrictions defined by Confucianism. Relative to Tao, the Confucian ideal society, in which the prince acts like prince, the minister acts like minister, the father acts like father, and the son acts like son, seems insignificant. A life following Tao is a much freer life; a life ending in Tao achieves eternity. Because of a person's relation to Tao, the person becomes simple, tranquil, and happy. There are two stories recorded in *Chuang Tzu* that demonstrate this idea.

1. Suddenly Master Lai grew ill. Gasping and wheezing, he lay at the point of death. His wife and children gathered round in a circle and began to cry. Master Li, who had come to ask how he was, said, "Shoo! Get back! Don't disturb the process of change!"

Then he leaned against the doorway and talked to Master Lai. "How marvelous the Creator is! What is he going to make of you next? Where is he going to send you? Will he make you into a rat's liver? Will he make you into a bug's arm?"

Master Lai said, "A child, obeying his father and mother, goes wherever he is told, east or west, south or north. And the yin and yang-- how much more are they to a man than father and mother! Now that they have brought me to the verge of death, if I should refuse to obey them, how perverse I would be! What fault is it of theirs? The Great Clod burdens me with form, labors me with life, eases me in old age, and rests me in death. So if I think well of my life, for the same reason I must think well of death. When a skilled smith is casting metal, if the metal should

leap up and say, 'I insist upon being made into a Mo-yeh!¹, he would surely regard it as very inauspicious metal indeed. Now, having had the audacity to take on human form once, if I should say, 'I don't want to be anything but a man! Nothing but a man!,' the Creator would surely regard me as a most inauspicious sort of person. So now I think of heaven and earth as a great furnace, and the Creator as a skilled smith. Where could he send me that would not be all right? I will go off to sleep peacefully, and then with a start I will wake up.'" (Watson 1968, 85)

2. Chuang Tzu's wife died. When Hui Tzu went to convey his condolences, he found Chuang Tzu sitting with his legs sprawled out, pounding on a tub and singing. "You lived with her, she brought up your children and grew old," said Hui Tzu. "It should be enough simply not to weep at her death. But pounding on a tub and singing--this is going too far, isn't it?"

Chuang Tzu said, "You're wrong. When she first died, do you think I didn't grieve like anyone else? But I looked back to her beginning and the time before she was born. Not only the time before she was born, but the time before she had a body. Not only the time before she had a body, but the time before she had a spirit. In the midst of the jumble of wonder and mystery a change took place and she had a spirit. Another change and she had a body. Another change and she was born. Now there's been another change and she's dead. It's just like the progression of the four seasons, spring, summer, fall, winter. Now she's going to lie down peacefully in a vast room. If I were to follow after her bawling and sobbing, it would show that I don't understand anything about fate. So I stopped." (Watson 1968, 192)

¹ A famous sword of King Ho-lu (514-496 B.C.) of Wu.

Thus, with regard to the process of life, both Confucianism and Taoism attempt to transcend the limited existence of the individual life, and they do so by placing the individual life in the whole. Confucianism combines the individual with the holistic--the family, the state, and the whole kingdom. The regulated family, the well-ordered state, and the peaceful kingdom are the extensions of the individual. Achieving these different levels of goals means the individual has risen to different degrees above the limited existence of its individual life.

Taoism unites the individual with Tao, the highest, most fundamental whole. The good or bad of the individual is of no meaning. Master Lai in the first story above was not influenced by the changes occurring in his body, because he had offered himself completely to Tao. He was only experiencing the workings of Tao, quietly observing the “process of change.” His life was no longer limited; the cycle of life and death is only a change that life takes in its form. It is the same thought about being one with the whole that led Chuang Tzu to the talk about the non-necessity to rejoice at a life born or grieve at a life lost.

Figure 2-2 on the next page depicts the Taoist view of Man’s life. This graphic differs from the one for Confucianism in that the embodying whole is no longer the kingdom, but Tao, and humans are only one of the things in the universe that comes from and ends in Tao.

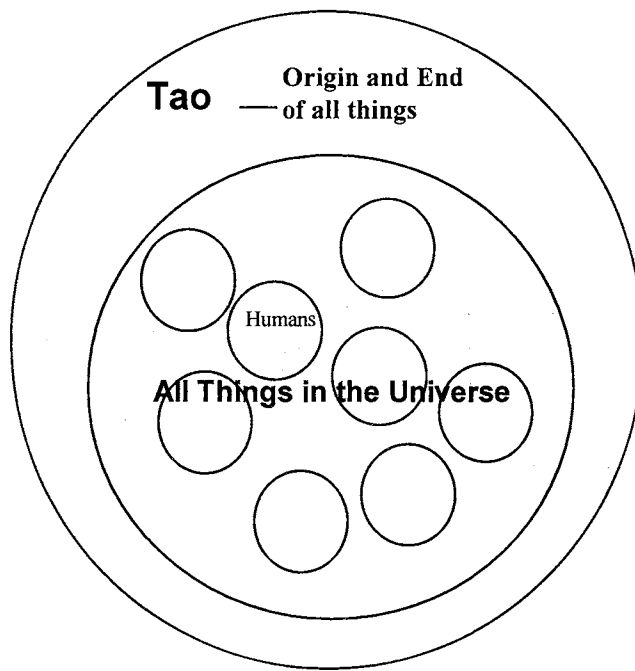


Figure 2-2. Taoist view of Humans and Universe.

Like Confucianism, Taoism also regards things in relation to others and emphasizes the relationship between one thing and its embodying whole. However, unlike Confucianism, which teaches people to exercise their rights and duties according to their particular social position, Taoism teaches the concept of equality by emphasizing the principle of relativity.

In “Discussion on Making All things Equal,” Chuang Tzu says,

There is nothing in the world bigger than the tip of an autumn hair², and Mount T’ai³ is tiny. No one has lived longer than a dead child, and P’eng-tsu⁴ died young. (Watson 43)

² The strands of animal fur were believed to grow particularly fine in autumn; hence “tip of an autumn hair” is a cliché for something extremely tiny. (Watson 43)

³ Mount T’ai is the largest of the five large mountains in China.

⁴ P’eng-tsu is said to have lived to be 800 years old.

In other words, the world is big relative to an area smaller than the world, such as a town or a village; Mount T'ai is high relative to something of less height, such as the level ground or a man's height; a dead child's life is short relative to people's normal life expectancy, so is P'eng tsu's long life. The properties of big and small, high and low, long and short, etc. exist only in relation to other things. Compared with the whole universe, the world is as small as "the tip of an autumn hair" compared with the world; hence, "There is nothing in the world bigger than the tip of an autumn hair." Compared with the Hymalayas, "Mount T'ai is tiny." Compared with the morning dew, the life of a dead child is long. Compared with the trees of thousands of years, P'eng tsu is short lived.

The works of Chuang Tzu and Laotse are full of such views of relativity. Further, in the Taoist point of view, we determine the properties of something, such as big or small, high or low, good or bad, beautiful or ugly, by placing it in its relationship with certain other things we choose. We actually do not know what a particular thing is. We only use a few relationships out of many that the thing is in to define it. Therefore, the definition must be limited. When we place the thing in some extended relationships, we will find our original definition is shaky.

Taoism believes that people should not view things in a particular limited relationship. They should widen their fields of vision as much as possible and view things in as a complete number of relationships as possible. Only then can they really recognize their own position in the universe, and in Tao, and follow the natural course of things to achieve freedom.

We can see now although Confucianism and Taoism are different in thought, they follow the same holistic and relational thinking mode. It is not strange that these different systems of thought should follow the same mode of thinking, because holistic and relational thinking is typical of Chinese culture. Confucianism and Taoism established their thought following this thinking mode, which, in turn, has enriched and strengthened this mode of thinking for the Chinese people.

Chinese scholars agree that the Chinese do not regard Confucianism and Taoism as two opposing systems of thought, but incorporate them. Frequently, when forging ahead or being successful, a Chinese is a Confucianist; when tired or frustrated, the same Chinese becomes a Taoist. As Fairbank puts it, “. . . the Chinese scholar was a Confucian when in office and a Taoist when out of office” (124). A Chinese can be concerned about his or her country or people with a Confucian attitude. The same Chinese can enjoy nature in carefree leisure and achieve perfect communion with nature like a Taoist (Lin 1937, Fan 1963, Hou 1982, Li 1986). Figure 2-3 on the next page graphically depicts this Chinese ideal of life.

It is the holistic and relational thinking that integrates the Confucian and Taoist views of life. Such thinking considers Tao as the loftiest ideal of life, yet recognizes the secular and material goals of life. Humans do not have to live always within the boundary of material goals. When necessary, they can go beyond the boundary and enter the lofty realm of life, becoming one with Tao and achieving eternity. Humans always yearn for eternity. Frequently, the purpose of religion and philosophy is to help people free from the

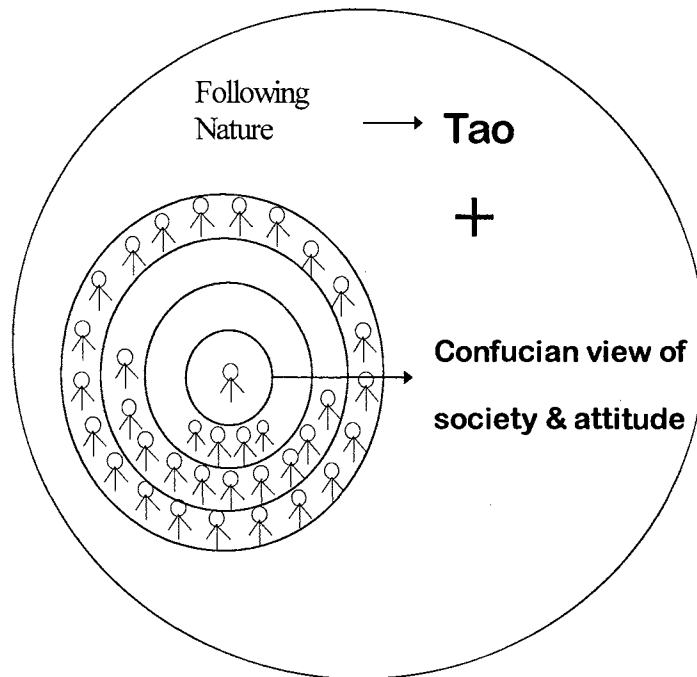


Figure 2-3. The typical Chinese view of an ideal life.

limited existence and realize eternity. The Chinese use the holistic and relational thinking to create a picture embodying both the finite and the infinite of the human life. In this picture, the triumphant can see further goals to achieve, whereas the disappointed can also find consolation and not become too concerned about temporary disappointments. Thus, Man's spiritual needs are satisfied to the greatest extent.

***Yin-Yang* Principle and Relational/Holistic Thinking**

Yin and *yang* are two mutually complementary principles or forces that constitute the universe and are the driving force behind the cycle of life and death for all things in the universe. All natural phenomena result from the ceaseless interplay of these two forces. This view is commonly accepted by the Chinese, whatever school of thought they

belong to (Hou 1982). The *yin-yang*-based Chinese world outlook reflects, more than anything else, the holistic and relational thinking of the Chinese people.

Yin and *yang* have many meanings. First of all, *yin* and *yang* are the fundamental forces that bring about the changes and development of all things in the universe (Wilhelm 1973). The Chinese character for change is 易 . It is a compound ideograph composed of the ideograph for the sun (日) and that for the moon (月). According to *Etymology of Characters*, a well-known ancient Chinese classic written by Xu Sheng in the late Han dynasty (25-220 A.D.), “the coming and going of the sun and the moon is just like the change of *yin* and *yang*. Hence the sun and the moon are put together to signify the meaning of change” (Cited in Liu 1988, 4). The formation of the character itself reveals a relational thinking mode. From the coming and going of the sun and the moon, which brings about the alteration of day and night, is derived the meaning of change. Here, the sun is *yang*, and the moon is *yin*.

Second, *yin* and *yang* are also the qualities abstracted from the things existing in the universe (Uritam 1975). *Yang* represents masculinity, light, warmth, dryness, hardness, activity, large, etc.; while *yin* represents femininity, darkness, cold, moisture, softness, passivity, small, etc. *Yin* and *yang* do not exist in isolation to each other. *Yang* becomes *yang* only in relation to *yin*, and *yin* becomes *yin* only in relation to *yang*. For example, the sun is *yang* relative to the moon, and the moon is *yin* relative to the sun. Man is *yang* relative to woman, and woman is *yin* relative to man. Fire is *yang* relative to water, and water is *yin* relative to fire. It is meaningless to speak of *yin* and *yang* separated from each other. Also, what is *yin* in one relationship may become *yang* in

another. For example, in the relationship of man and woman, man is *yang*. However, in the relationship of father and son, father is *yang*, while son is *yin*, even though son is also man. Therefore, *yin* and *yang* acquire meaning only in certain relationships.

Third, *yin* and *yang* are not absolute but are transformable into each other. The *yin-yang* principle is the “principle of transformation” (Yosida 1973, 73). *Yin* embodies the element of *yang*, and *yang* embodies the element of *yin*. A typical example is the way the Chinese view life and death. In the relationship of life and death, life is *yang*, while death is *yin*. Life gradually approaches death because life embodies the element of death. In other words, *yang* embodies the element of *yin*. The process of life approaching death is that of the element of death in life becoming increasingly bigger. In terms of *yin* and *yang*, it is the process of the *yin* in the *yang* growing bigger and bigger. However, death is not the simple negation of life. Death means a change in the form of life. Death is one form of life.

The well-known *Taijitu*, or the *Taiji* Visual (Figure 2-4 below), best illustrates the interplay of *yin* and *yang*.

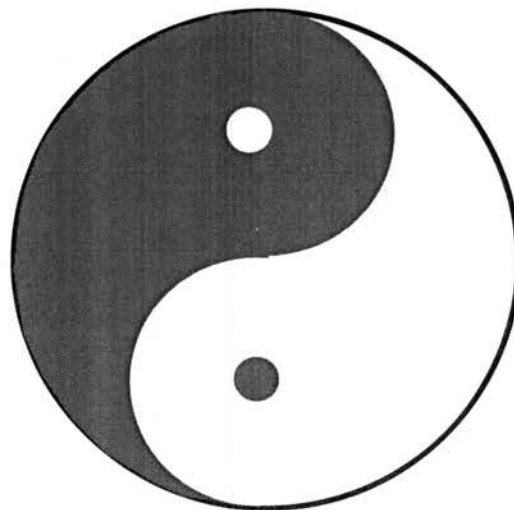


Figure 2-4. *Taijitu*, or *Taiji* Visual.

Taijitu is formed of two fish-like shapes representing *yin* and *yang*. The idea of *Yin* embodying *yang* and *yang* embodying *yin* is represented by the little circles (the fish eyes) existing in the fish-like shapes. When either one of them grows to its uttermost (the fish head), it begins to decline and the other's growth begins (at the fish tail). Thus, the Chinese epitomize the principle of change and development governing all phenomena in the universe, both physical and social, with the growing and declining of *yin* and *yang*.

The concept of *yin* and *yang* and the application of it can be found in every part of Chinese life: It is part of the theoretical foundations of the traditional Chinese medicine; it is used to explain the flourish and decline of dynasties and governments; and it is the rationale even for the ingredients of dishes or the number of dishes for a feast in Chinese cuisine. The *yin-yang* concept is clearly a significant element in Chinese culture, and, with its distinctive relational and holistic feature, it contributes greatly to the typical Chinese mode of thinking.

Chinese Language and Relational/Holistic Thinking

The relationship of language and thinking is often discussed in terms of the Sapir-Whorf hypothesis of linguistic relativity. According to this view, a language predisposes or predetermines its speakers to certain modes of observation and interpretation of the environment (Hoosain 1986). The strong version of the linguistic relativity principle has now fallen into discredit, largely due to its one-sidedness and extremity. For us, the significance of the Sapir-Whorf hypothesis lies in the fact that it calls attention to the

relationship of language and thinking, and this relationship is “very much relevant to cross-cultural studies of cognitive behavior” (Hoosain 1986, 1). Language, as the vehicle of thought, may embody philosophical outlooks and patterns of thinking of a people in many ways (Cheng 1973). Consequently, it can well reflect the thinking mode of the culture using the language, as well as its characteristic pursuits and interests.

The Chinese language is “the oldest in the sense that among the scripts in use today, Chinese characters have the longest history of continuous use” (DeFrancis 1984, 40). The Chinese language clearly demonstrates the relational, holistic thinking mode of the Chinese people. In this section, I will look at the relational, holistic nature of the Chinese language at the levels of the script or characters, compound expressions, and syntax.

Chinese Characters

The most apparent distinction of the Chinese language from most other languages lies in its script. Chinese is written in symbols, called “characters,” instead of letters. Each character consists of a certain number of strokes, which are written in a prescribed order and is designed to fit into an imaginary square space.

The original construction of Chinese characters was based on four major principles, which have produced four major categories of characters. They are 1) pictorial representation, which produces pictographs; 2) diagrammatic indications of ideas, which produces ideographs; 3) assembly of meaning, which produces compound ideographs; and 4) combination of a significative element and a phonetic element, which produces

phonetic compounds (Chao 1968; Chu Yu-kuang 1973). I will use examples to describe all four categories, but with an emphasis on the last two as they most clearly demonstrate the relational and holistic thinking of the Chinese, their creators and users.

1) Pictographs

Pictographs are characters originated from pictures of objects. In the present form they are not clear, but in the archaic forms of more than 3,000 years ago, their pictorial aspect can be seen clearly. Typical examples (See Table 2-1 below) include the character for “sun.” It is a circle with a dot in the center. Later on it was conventionalized into an upright rectangle with a short horizontal stroke in the middle. A crescent represents “moon.” Three peaks stand for “mountain.” The symbol for “tree” has a vertical line to represent the tree trunk, two spreading strokes at the bottom to represent roots and two others at the top to suggest branches. The character for “door” is clearly the picture of a pair of swinging doors and has changed very little throughout more than 3,000 years.






English	Chinese	
	Archaic Form	Present Form
Sun		日
Moon		月
Mountain		山
Tree		木
Door		門

Table 2-1. Examples of Chinese pictographs.

2) Ideographs

With ideas that are difficult to picture, the ancient Chinese diagrammed them, which resulted in ideographs. For example, one, two, and three are represented by one, two, and three horizontal strokes respectively. A dot above a horizontal line represents “above,” and one below such a line stands for “below.” A vertical stroke running through a circle means “middle” or “center”. Table 2-2 below shows these examples.

English	Chinese	
	Archaic Form	Present Form
One	—	一
Two	==	二
Three	===	三
Above	· —	上
Below	— ·	下
Middle	⊕	中

Table 2-2. Examples of Chinese ideographs.

As Cheng (1971) points out, “Chinese language as a morphology closely resembles reality of nature as man experiences it” (3). Indeed, as a system of ideographs, Chinese language maps the real world on many levels. Not only concrete familiar objects are generally mapped in pictographs and simple ideas in ideographs, their relations are ideographically represented, as is demonstrated in the following two categories.

3) Compound ideographs

Compound ideographs are characters in which the meaning of the whole is a combination of the meanings of its parts. Compound ideographs are composed of two or more ideographs to suggest a new idea. For example, the word “night” is composed of three parts: house, human, and the Moon. The word “hear” is formed by placing an ear between the two panels of a door. Two trees standing side by side suggest “forest,” and three trees become a “jungle.” Likewise, “multitude” is represented by the character for “human” repeated three times. The sun shining through the tree means “east.” A woman holding a child means “love,” since love is good, the word by extension of meaning also means “good.” Both the sun and the moon emit light, so they were put together to mean “bright.” The coming and going of the sun and the moon brings about the alteration of day and night. Consequently, the sun and the moon were put together in another formation to represent “change.” Table 2-3 on the next page provides these Chinese characters.

A close look at these compound ideographs will reveal that they are formed according to various relations of the component parts, and these relations arise from the Chinese way of looking at the world or the Chinese mode of thinking.

夜 (night) = 宀 (house) + 人 (human) + 月 (the moon)

Here, the moon and the night are naturally related; the moon is an element of the night. But what brings the house, the humans, and the moon into a relationship may be typically Chinese. The Chinese see the universe as consisting of three levels, Heaven, Earth, and

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English	Chinese	
	Archaic Form	Present Form
Night	𠄎	夜
Hear	聞	聞
Forest	林	林
Jungle	森	森
Multitude	衆	众
East	東	東
Love/Good	好	好
Bright	明	明
Change	易	易

Table 2-3. Examples of Chinese compound ideographs.

humans⁵. In this character, house obviously represents the Earth. Thus, in this single word is reflected a holistic view of the universe.

林 (forest) = two 木 (trees)

森 (jungle) = three 木 (trees)

众 (multitude) = three 人 (persons)

All three of these words embody the relationships of part and whole, more and less. Three is a big number in Chinese culture, implying many. For example, Confucius

⁵ As cited earlier in the section on Taoism, Laotze says, “Tao is great, the Heaven is great, the Earth is great, Man is also great. These are the Great Four in the universe, and Man is one of them. Man models himself after the Earth; the Earth models itself after Heaven; the Heaven models itself after Tao; Tao models itself after Nature” (Lin 145). The Book of Changes also says, “. . . the Tao of Heaven is sustained by *Yin* and *Yang*, the Tao of Earth is sustained by softness and hardness, the Tao of Man is sustained by benevolence and righteousness” (Liu 21) These are philosophical views. But we can see from these why for the Chinese, the world of experiences is made of the Heaven, the Earth, and the Man.

has a well-known saying that goes “One out of any three people may be my teacher” (Confucius Bk. VII, Chap. XXI). Confucius also advises, “Think three times before you act” (Bk. V, Chap. XIX).

東 (east) = 木 (tree) + 日 (the sun)

When Chinese children learn this character, they are usually told the following story. Cangjie, (the legendary creator of Chinese characters,) had spent a whole night trying to create a character for “east.” He knew the sun rises in the east, so he would certainly use the character for the sun. But how to differentiate “east” from the “sun”? Early in the morning, he walked out of his house to stretch his limbs. He faced to the east, breathing the fresh morning air and enjoying the rays of the rising sun. Suddenly, he held his breath; he saw the character! There were many poplar trees around his house, and now bathed in the rays of the rising sun, they were looking so lively, so beautiful. The relation of the sun and trees became clearer than ever to him, so was the character he is going to use for “east.” Then he went on to create another character. He put the sun on top of a tree to describe the brightness of the sun in the midday, and that is the character 杲. Although this is only a story, it nevertheless reflects how the Chinese see things in relations and how they derive meaning from the relations.

好 (love/good) = 女 (woman) + 子 (child)

This character is a typical example that demonstrates the holistic thinking mode of the Chinese people. When one sees a woman with her child, one often sees love; if not, one should. Further, love is good. Here, the meaning of the character is derived not only

from the combination of the component parts, like all other compound ideographs, but also from the whole event these components represent. The meaning is also related to the natural feelings that arise in a person witnessing the event.

明 (bright) = 日 (the sun) + 月 (the moon)

易 (change) = 日 (the sun) + 月 (the moon)

Here, both characters are formed of the same two ideographic parts, the sun and the moon. The Chinese see different relations between the two objects, which results in different meanings. The meaning “bright” is derived from one obvious common property of the two heavenly bodies. The meaning “change” is derived from their movement. The sun and the moon are parallel to one another in the sense that they both give out light, and parallel things are usually placed side by side.

The movement of the sun and the moon brings about the change of day and night, which further creates the concept of time. Time is a vertical idea for the Chinese, whereas space is horizontal, as is shown in the Chinese expressions such as “up and down 5, 000 years” (throughout 5, 000 years), but “run a horizontal thousands of miles” (run thousands of miles), and so on. That is why the character for “change” has a vertical formation.

4) Phonetic compounds

Phonetic compounds are by far the most common type of Chinese characters (Chao 1968). A phonetic compound is composed of two parts, a significative element

called “radical” and a phonetic element (Chu Yu-kuang 1973). The radical indicates the general category of things to which the meaning of the character belongs, while the phonetic element suggests the pronunciation of the character. There are a total of 214 radicals, according to which Chinese characters are classified in a dictionary. Many of these radicals are simplified forms of pictographs, and they indicate the general categories of things or ideas. The phonetic element is usually a pictograph or ideograph as well. However, in the phonetic compound, the pictograph or ideograph only suggests pronunciation, not meaning. Table 2-4 below provides some examples of characters in this category. (Note that in the radical column, the first is the radical, and the second is the character from which the radical is derived. In the other two columns, the part in brackets represents the pronunciation.)

Radical	+	Phonetic element	=	Phonetic Compound
扌 / 手 (hand)		包 [bao] (bag)		抱 [bao] (hold)
足 / 足 (foot)		包 [bao] (bag)		跑 [pao] (run)
氵 / 水 (water)		包 [bao] (bag)		泡 [pao] (bubble)
火 / 火 (fire)		包 [bao] (bag)		炮 [pao] (cannon)

Table 2-4. Examples of Chinese phonetic compounds.

Phonetic compounds began to appear in the Chinese vocabulary in the 15th century B.C., and their appearance marks the maturity of Chinese characters. Since then, phonetic compounds have been the major principle of character formation for the Chinese to expand the existing vocabulary to meet the increasing demand of use (Wang 1980). The particular method a culture adopts to enlarge its vocabulary is closely related to the particular thinking mode of the culture. The fact that the Chinese use the principle of phonetic compounds as the major means to expand their vocabulary reveals the relational thinking mode of Chinese culture.

With phonetic compounds, objects and ideas are placed into categories symbolized by radicals. The categorization is based on the relationship among either the concrete or abstract properties of the objects or ideas. As a result, all words with the same radical are related in some way. For example, all the following words, (and many others), have something to do with water 水, which is symbolized by the water radical 氵.

河 (river) 海 (sea) 洋 (ocean) 液 (juice) 汗 (sweat) 洗 (wash) 湯 (soup) 泳 (swim) 泪 (tears) 池 (pond)

New ideas or objects related to water will also be added to this category. They will be formed by combining the water radical with an ideograph or a pictograph representing the sound. Consequently, when a Chinese comes across a strange character out of context, he or she can frequently guess the right meaning by following the hint of the significative radical and the phonetic element.

Meanwhile, we can also see in the phonetic compounds a holistic, relational view of the natural world. We can see how the Chinese categorize the natural world by looking at the radicals they have created for their characters. We can construct a picture of the universe with the major radicals, a picture that matches the traditional Chinese view of nature or cosmology.

First of all, there are the radicals for the five elements, metal (金 / 金), wood (木 / 木), water (氵 / 水), fire (火 / 火), and earth (土 / 土), which are both concrete things and “symbols of five fundamental processes characteristic of these elements” (Uritam 140). Then, there is heaven or sky (天 / 天), where the sun (日 / 日), the moon (月 / 月), and the stars (星 / 星) are located. Then, on earth, there are humans (人 / 人), insects (虫 / 虫), birds (鳥 / 鳥), beasts (犬 / 犬), grass (艹 / 草), mountains (山 / 山), stones (石 / 石), rice (米 / 米) and so on and so forth. All these make up the universe in which humans live in.

Meanwhile, every component of the universe is a small world in itself that interacts with the big world, which is the universe. The Chinese seem to be most familiar with the small world that is the human being itself. Consequently, we find radicals that represent almost every part of this world: head (首 / 头), eye (目 / 目), ear (耳 / 耳), nose (鼻 / 鼻), mouth (口 / 口), tooth (牙 / 牙), heart (心 / 心), hand (手 / 手), foot (足 / 足), skin (皮 / 皮), and etc. Unsurprisingly, these radicals occur almost in every character that expresses an action that is related to the part represented by the radical. Among the abundant examples are 看 for “look,” 言 for “speak,” 思 and 想 for “think,” and 跑 for “run.”

The thinking mode underlying this kind of character formation is clearly relational and holistic. It is relational and holistic thinking and the corresponding view of an organic nature that have conditioned the Chinese people in the first place to adopt this particular method of character formation as their major means of constructing new characters.

The categorization of the natural world as reflected in the radicals and their characters is like the interpretive schemes of the Constructivism, which the Chinese apply not only to order and understand the natural world as they see it, but also to understand and integrate new knowledge from other parts of the world. A typical illustration is the Chinese Periodic Table of Elements. Most of the characters for the 103 chemical elements in the table were created in modern times when western science entered China, and they were created as phonetic compounds. Consequently, all these 103 chemical elements can be grouped into four categories according to their Chinese names: metal types with their “metal” radical (钅), such as radium (镭) and uranium (铀), non-metal types with their “stone” radical (石), such as boron (硼) and iodine (碘), gas types with their “air” radical (气), such as helium (氦) and argon (氩), and liquid types with their “water” radical (氵), such as bromine (溴).

Thus, this character formation principle, which is based on the particular interpretive scheme, enables the Chinese to integrate new concepts easily into their language. Further, it makes it easy for them to learn these concepts through the characters which are new yet familiar in some way.

Chinese Compound Expressions

Many Chinese expressions have a relational, holistic nature. They are compound expressions composed of antonyms. However, “the antonyms are not thought of as irreconcilable opposites but as being united to form a complete idea” (Chu 1973, 599). A typical example is the compound expression, *yin-yang* (阴 阳), which is, as I have discussed earlier, one of the important concepts in Chinese philosophy. *Yin-yang* is a compound of antonyms, *yin* and *yang*. *Yin* is associated with darkness, cold, wetness, softness, quiescence, femininity, earth, moon, north, below, squareness, even numbers; *yang* is associated with light, heat, dryness, hardness, activity, masculinity, heaven, sun, south, above, roundness, odd numbers. Combined in the compound expression *yin-yang*, these two terms denote a concept of two opposing but complementary forces in the universe interacting to produce all things.

Other examples include “spring-autumn” (春秋) for “history,” “buy-sell” (買賣) for “trade,” “advance-retreat” (進退) for “movement,” “rule-chaos” (治亂) for “political condition,” “big-small” (大小) for “size,” “lance-shield” (矛盾) for “contradiction,” and many more. These expressions demonstrate that the Chinese regard things holistically, trying to include all related aspects. The whole embodies the various parts but is more than the sum total of the parts. Such terms also imply the idea that nothing is absolute; there are two opposing aspects in everything, which is consistent with the *yin-yang* concept.

Chinese Syntax

The syntax of the Chinese language is of a relational, holistic nature as well. DeFrancis (1984) describes Chinese as a “context-oriented language” (52). A Chinese sentence does not have syntactic marks of number, person, case, and tense (Cheng 1971). This feature does not mean that Chinese sentences do not convey such information. Rather, the functions of number, person, case, and tense are delegated to word order, the use of auxiliary words, and the context. Consequently, attention is focused on word relations rather than on individual words themselves.

For example, a Chinese word does not have part of speech embodied in it, such as noun, verb, etc. The idea of part of speech is imported from the West in modern times. Instead, Chinese words are divided into two big categories, notional and empty. The empty category includes all auxiliary particles, such as 的, the possessive particle, and 了, the particle indicating past tense. All others belong to the notional category. Any notional word can be a noun or verb depending on its position and function in the sentence, as illustrated in the following two sentences.

- a) 跑 對 身體 好。
Running is good for your health.
- b) 別 跑 太 快。
Don't run too fast.

Here, the same character 跑 is used as a noun in the first sentence for “running,” but a verb in the second for “run.” Its part of speech is identified through an understanding of

the sentence in which the word occurs. Also, because Chinese is basically a subject-verb-object language (DeFrancis 1984), the position of the character in the sentence helps to identify its part of speech as well.

Considering the fact that it is not only part of speech, but number, person, case, and tense, that are determined in relation to other words, the importance of word relations and context for the Chinese language is obvious. It is this relational nature of the Chinese language that has led Cheng (1971) to comment

[The] Chinese language, in so far as its grammar is concerned, seems to exhibit the basic points of Chinese philosophy, and indeed can be taken as a concrete illustration of important Chinese philosophical principles such as that the whole is relevant for, and contributes to, the determination of the part in the whole. (213)

Indeed, because Language is created by people, language both illustrates and demonstrates the thinking of the people. Chu points out, “the monosyllabic noninflecting and ideographic characters provided a congenial medium for relational thinking, which has been a distinctive quality of Chinese thought and culture” (599). In fact, the “medium” is created because of the thinking mode. It is holistic and relational thinking that led the Chinese in the first place to develop and use the particular principles of character formation, to create the distinctive compound expressions, and to work with the particular syntax. Meanwhile, the relational nature of the language also influences the thinking of the Chinese people and reinforces their relational and holistic thinking.

Chinese Landscape Painting and Relational/Holistic Thinking

Chinese landscape painting goes back to ancient times and boasts the most outstanding achievements of all Chinese painting. There have been great landscape painters in almost every period of the Chinese history. Most Chinese landscape painters do not care about personal fame and gain. In their personality and thoughts, they are like Taoists. They like to live in the seclusion of the woody mountains, following the rhythm of nature. They want to achieve the uttermost communion with nature, and then depict the spirit and rhythm of nature with their romantic brush (Lin 1937).

The most ideal state for Chinese painters is forgetting the difference between the object and the self. When they are absorbed in painting, they have no idea whether they are depicting trees, rivers, mountains, etc., or whether they are depicting themselves. For them it is no longer important, because the two have become one (Huang 1994).

A Chinese landscape painting frequently does not have a focal point around which all other objects in the painting center. If we have to analyze the organization of a Chinese landscape painting according to the rules of perspective, we will find many focal points. This feature of Chinese painting is called “scattered perspective,” which, in reality, means there are no focal points (Zhong 1982).

A focal point arises from the separation of the object and the self, with the self as the observer and the object as the observed. The self takes a particular perspective at the object and reflects this perspective in the painting, which is the focal point, then organizes the painting around this focal point.

For Chinese painters, the relation of the self and the object is not that of the observer and the observed. Chinese painters try their uttermost to remove the distance between the self and the object. They do not start with observing mountains and rivers, but with feeling and experiencing them, trying to merge themselves with the mountains and rivers and forget the distance of the self and the object. This attitude toward painting is illustrated by the life of the great painter Huang Ziji in Yuan Dynasty (1206-1341), as described by Li Rihua (1565-1635):

Huang Ziji often sits the whole day in the company of bamboos, trees, brush-wood and piles of rocks in the wild mountains, and seems to have lost himself in his surroundings, in a manner puzzling to others. Sometimes he goes to the place where the river joins the sea to look at the currents and the waves, and he remains there, oblivious of wind and rain and the howling water-spirits. This is the work of the Great Absent-Minded [name of the painter], and that is why it is surcharged with moods and feelings, ever-changing and wonderful like nature itself. (Cited in Lin 1937, 289)

The ideal state for paintings to be “surcharged with moods and feelings, ever-changing and wonderful like nature itself” is achieved by the painter not as an observer, but as a participant. The painter merges himself with nature, so when he paints mountains, he himself becomes mountains; when he paints creeks, rivers, or lakes, he himself becomes creeks, or rivers, or lakes. He forgets that he is painting. Instead, he feels that he is standing towering like the mountain or he is flowing like the creek, the river, or the lake. He does not delineate the details exactly, nor does he use a focal point. Life is an organic whole. The mountains, creeks, and trees in the painting do not exist

isolated from one another. They exist together in perfect harmony and form an organic whole of life. When a painting succeeds in creating this organic whole of life, it has achieved “spiritual likeness” (Huang 1991, v). It is spiritual likeness, not photographic reproduction of the material reality, that Chinese painters strive to achieve in their paintings.

Consequently, the masterpieces of Chinese landscape painting are another illustration and product of holistic and relational thinking. The painter looks upon nature as an organic whole of life, and the painter himself merges harmoniously into this whole. His painting process is not a process of delineating nature, but that of feeling and experiencing this organic whole.

Lei Feng and Holistic/Relational Thinking

The Confucian ideal of life, which reflects the holistic and relational thinking mode, had influenced the Chinese people for thousands of years. However, with the 1910 Democratic Revolution, which overthrew the last feudal government in Chinese history, the New Cultural Movement arose. This movement criticized the traditional Chinese culture. Confucianism, which had been the pillar of the traditional Chinese culture, became an object of attack, as was testified by the slogan of the movement, “Down with Confucianism!” (Jian 1983).

It appears that since then, various western ideologies, like democracy, freedom, and Marxism, began to influence China in place of Confucianism. In reality, the Chinese have only characteristically integrated these foreign thoughts with their holistic and

relational thinking. What they believe in is a Chinese-style democracy or a Chinese-style Marxism. Even today, Deng Xiaoping, the highest leader in China's economic reform, is advocating "building the Chinese-style socialism." In fact, the so-called "Chinese-style" is a combination of foreign terms and Chinese content, a combination constructed with holistic and relational thinking. The "Learn from Lei Feng Movement" is a typical example of this Chinese feature.

The "Learn from Lei Feng Movement" was started in communist China in the 1950s, and it has continued till today. Lei Feng was set up as a model example of communist morality. Lei was a very common soldier. In his short life, he did not make any glorious achievements. We cannot see much relationship between him and Karl Marx because Lei had only very limited education and he could not read those esoteric works of Marx. But he was an honest and kind-hearted soldier who followed the military rules strictly and enjoyed helping others. The numerous stories told of him are all about how he helped others without thinking about himself. Mao Zedong's comment of him is "Never benefit himself, always benefit others."

Lei was not only ready to help others, but he would not reveal his name to the people he helped. Many of these people learned that they had been helped by him only after he had died and the "Learn from Lei Feng Movement" was initiated. They recognized him from his pictures in the newspapers. In his diary, he wrote, "I live to be beneficial to other people. . . I'm willing to be a screw that never rusts" (Lei 1982, 1). Words like *communism* occur rarely in his diary. People are moved by him because he

had a very kind heart, and he behaved like a screw that silently contributes to the workings of the whole machine.

For several decades, Lei Feng has been set up in communist China as a model of communist morality for every Chinese to emulate. The reason is not that Lei is really related to Marx's ideal of communism, but that his attempt to be "a screw that never rusts" reflects the fundamental Chinese view of a human being (Lei 1982, 1). A human being is not an isolated individual; a human being exists as a part of a whole and in relation to the other parts of the whole; and as a part, the human being should contribute to the smooth functioning of the whole.

This view of humans is essentially the same as the Confucian view of humans discussed earlier, except that Confucianism places humans in the whole of a family and then the whole of a country. In Lei Feng's time, it is stressed that a human being is a part of the society. Society is a whole, and it is compared to a machine. The smooth functioning of the machine requires the contribution and cooperation of each and every part. A part as small as a screw also plays an indispensable role. By itself, the screw is of no use. Only when it exists as a part of the machine does it acquire its function, and its meaning of existence.

The Lei Feng example shows that the Chinese still view human beings in a relational and holistic way. Whatever new terms are used, the fundamental implications remain the same. In other words, words and behavior may change, but the underlying thinking mode does not.

Summary and Implications for Cross-Cultural Technical Communicators

In this chapter, I have demonstrated, through brief examination of several aspects of Chinese culture, the typical Chinese mode of thinking. I have shown that the thinking mode underlying the two native Chinese systems of thought, Confucianism and Taoism; the even more fundamental Chinese outlook of the world, the *yin-yang* principle; the Chinese language; the creation and appreciation of Chinese painting; and finally, the contemporary model of social morality is all relational and holistic.

By relational and holistic, I mean that the Chinese do not look at things as isolated entities, but regard any object as part of the organic whole it exists in. The Chinese focus on the various relationships of the parts that make up the whole while always keeping the whole in mind. For them, the parts do not fit into a causal hierarchy, but are associated with one another in mutual influence and mutual dependence, and by principles of similarity and relativity. When studying an object, they try to be comprehensive and look into all the aspects related to the object, rather than focus on one aspect and dig deep into it. In other words, they like to have “a big picture” of everything.

Meanwhile, when we conclude that the typical thinking mode of the Chinese is relational and holistic, we can only regard this conclusion as a generalization, which, like all other cultural generalizations, should be viewed as “approximations, not absolutes” (Samovar 1991, 17). As we know all rules have many exceptions.

Nevertheless, for cross-cultural technical communicators, this high-level generalization holds significant implications. It provides insights to the cognitive

features of their Chinese readers, which can suggest effective means for the communicators to adapt their documents to the Chinese readers. For example, cross-cultural technical communicators may consider organizing their document in a way that is consistent with holistic and relational thinking. An organization pattern of general-to-specific or big-to-small may be the best choice to help the Chinese readers to process information effectively.

With relational thinking, the Chinese have a relational way of cognition, which is also taught by Confucius. They tend to explore the unknown by proceeding from the principles of what is known and follow the principle of similarity to investigate the various relationships between the known and the unknown. Believing that nothing exists by itself, they focus on the various relationships existing among things, including the relationship of both coordinating and subordinating similarity and the relationship of relativity. And they are apt to recognize the relationship between analogical entities.

Consequently, cross-cultural technical communicators should also focus on relationships when they explain the strange and the complex for their Chinese readers. In other words, to help the Chinese to understand the strange and the complex, they should exploit the explanatory power of analogy and strive to explain what is unknown in terms of what is known and familiar. (The next chapter will discuss in greater detail the Chinese use of analogy for persuasive purposes.)

The relational and holistic nature of Chinese thinking and the ideographic characteristic of the Chinese language also suggest that the Chinese have superior visual abilities, or at least, they are sensitive to visual presentations. Cross-cultural technical

communicators can also exploit this capability of the Chinese to make their documents more effective for their Chinese readers.

Further, the features of relational and holistic thinking as revealed in the various aspects discussed in this chapter also suggest specific techniques cross-cultural technical communicators can use to adapt the documents to the Chinese readers. The Confucian emphasis on the harmony of human relationships, for example, suggests the kind of relationship the communicators should establish with their Chinese readers. Using a polite and friendly tone in the technical document to cultivate a rapport with these readers is necessary, in fact, expected for effective communication with people of Chinese culture. Likewise, for better effect, the visual features of the document should also contribute to the general impression of harmony, a quality especially valued by Chinese culture.

In sum, cross-cultural technical communicators should keep in mind that the Chinese typically think in a holistic and relational way and strive to adapt their documents to this particular feature of their Chinese readers.

CHAPTER 3

ANALOGY AS A SIGNIFICANT ELEMENT IN CHINESE PERSUASION

Technical communication is persuasive communication. Frequently, the goal of technical communicators is to persuade their readers to adopt a particular course of action, as in proposals. Even in user manuals, one of the goals of the technical communicator is to convince the readers that they know what they are doing so that the readers have confidence in the instructions. In cross-cultural technical communication, the element of persuasion becomes even more important. Here, the cross-cultural technical communicator faces the unusual challenge of persuading people of an entirely different culture, people who may, because of the very difference, have a cultural block to the information communicated. Knowledge of the persuasive style of the target culture should definitely aid cross-cultural technical communicators in designing an appropriate persuasive strategy for their documents.

As I have discussed in the previous chapter, the Chinese have a distinctive mode of thinking that is different from the people of the West. They think in a holistic and relational way, rather than analytically. This thinking mode and the influences that contribute to this thinking mode have also produced a distinctive feature in their persuasive style: the Chinese rely heavily on analogy in their persuasive acts.

Analogy is a “question of comparison of some relationship to another” (Perelman 1982, 114). It focuses on the similarity between things. Analogical reasoning is different from the typical Western reasoning that proceeds either deductively from general statements to a conclusion, or inductively from a number of specific examples to a generalization. The analogical argument assumes that because two cases or situations are similar, and one of them is known to have certain characteristics or to develop in certain way with certain results, the other has similar characteristics and will proceed in a similar way (Long & Garigliano 1994). To persuade their Chinese readers effectively, cross-cultural technical communicators should be aware of this Chinese persuasive feature so different from the one they are used to in their own culture. Considered in terms of Richard Petty and John Cacioppo’s Elaboration Likelihood theory, the Chinese’s heavy reliance on analogy in persuasion is also a significant point that cross-cultural technical communicators should understand.

Elaboration Likelihood theory is one of the most popular persuasion theories in the West today (Littlejohn 1992). According to this theory, people process information from persuasive messages in one of two ways: through a central route or a peripheral route. When processing information through the central route, people actively think about the information and measure it against what they already know. When they process through the peripheral route, people tend to be influenced by factors other than the argument itself (Petty & Cacioppo 1986). Frequently, people process information through both routes.

The theory also identifies the persuasive factors or cues functioning in the two processing routes. In central processing, major persuasive factors are the degree to which the message matches the previous attitude on the one hand and the logical strength of the argument on the other. In peripheral processing, persuasive cues include the credibility of the information, the degree to which the topic is liked, and the number of arguments presented (Petty & Cacioppo 1986). The lesson of this theory is that, to persuade, people should pay special attention to central processing factors without ignoring peripheral cues.

In cross-cultural communication, however, communicators need to consider both central and peripheral factors in a cultural context. Central factors in one culture may be peripheral cues in another. The heavy reliance on analogy of the Chinese in their persuasive acts means that the Chinese pay equally great attention, sometimes even more attention, to the cues that the theory would consider peripheral. For the Chinese the central and peripheral cues are frequently combined in the analogy that is often the means to present the argument. The strength of the argument is derived largely from the appeal of the analogy used, from its credibility and appropriateness.

The Chinese use analogies not only for persuasion, but also for explanation, and often in the same context. However, analogies used as arguments work differently from analogies used for explanation. The goal of explanatory analogies is to facilitate understanding. Consequently, because the two entities involved, the analogical source, *X*, and the analogical target, *Y*, are similar but never equal to each other entirely, the author

needs to explain how *Y* is different from *X* in certain aspect, unless the difference is already clear. Otherwise, the analogy would confuse rather than clarify the meaning of *Y*.

On the other hand, the goal of an analogical argument is persuasion. The author persuades based on the analogical similarity of *X* and *Y*. The reasoning is that because *Y* is similar to *X* in terms of the underlying relationships or structures, (they do not have to possess apparent likeness,) and that *X* is known to have certain characteristics or to develop in a certain way with certain results, *Y* has similar characteristics and will develop in a similar way. The persuasiveness of the argument is determined by whether *X* is credible and whether it is appropriate to place *X* and *Y* in the same category, in other words, whether these two cases are really similar, really parallel. Consequently, the Chinese often counter-argue by questioning the credibility of the analogy or by targeting its appropriateness. This point will become clearer when I discuss typical examples later in this chapter.

In the rest of the chapter, I will first discuss why the Chinese rely heavily on analogy in their persuasion. Then I will analyze a few classic examples to provide a more concrete idea of how the Chinese use analogy to persuade. Finally, in the last section, I will briefly discuss implications of this distinctive feature of Chinese persuasion for the cross-cultural technical communicator. I will address the last topic in greater detail in the next chapter.

Why the Chinese Rely Heavily on Analogy in Persuasion

In the Chinese language, the earliest equivalent for “analogy” is 譬. However, this Chinese equivalent has a broader meaning. According to the *Chinese-English Dictionary*, 譬 means "example; analogy" (1981, 517). The same word is used to refer to both examples and analogies because both figures of speech involve comparison and are based on the similarity between two entities.

Likewise, Long and Garigliano (1994) consider analogy as something based on the underlying similarity between two situations or patterns or structures. Analogy in this sense also takes a broad meaning. It not only refers to cases where a is to b as c is to d , but also includes uses of metaphors, similes, and examples. In other words, in both Western and Chinese cultures, analogy is a kind of thinking that recognizes and exploits similarities between things.

For the Chinese, analogical reasoning is especially appealing because it well suits the Chinese thinking mode and the most important values of the culture. This section discusses several factors that contribute to the Chinese’s heavy reliance on analogy in persuasion. These factors are the functions of analogy, the influence of relational and holistic thinking, the contribution of cultural values, and the Confucian and Taoist heritage.

Functions of Analogy

Analogy has the same functions in both Western and Chinese cultures, but its application is not entirely the same. In the West, analogy is probably used mainly for

explanation. In Chinese culture, analogy is used also as a significant means of persuasion.

Analogy has at least three functions in communication. One is to promote understanding by making the complex simple, the abstract concrete, and the unfamiliar familiar. Analogy can explain the unknown and the abstract through the familiar and the tangible, and thereby can help the person to grasp the issue properly. The Chinese use this explanatory power of analogy also as the first step toward successful persuasion. They rely on analogies to make the person to be persuaded understand both the matter at issue and the argument.

Another function of analogy is to “allow people to express thoughts indirectly” (Holyoak & Thagard 1995, 7). Analogy allows people to present opinions about a matter without actually mentioning the matter itself in cases where direct communication would either break a rule or cause embarrassment. This function of analogy is especially applicable in Chinese culture. The Chinese live in a very structured society where people are expected to show respect for their superiors and elders and strive for harmony. Consequently, people frequently find themselves in situations where it is either dangerous or inappropriate to conduct direct persuasion. They then resort to analogy to present their arguments indirectly.

A third function of analogy is to help decision-making in situations where “one knows little about the probabilities or utilities of various possible outcomes or one simply has no idea what possible actions are open” (Holyoak & Thagard 1995, 139). In such cases, similar past situations and decisions can suggest possible actions to take and

forecast potential effects of the actions. Because the Chinese have a great respect for history, they use this function of analogy not only to help decision-making, but to help persuasion. For them, analogy in the form of historical examples often has the power of authority, and they often use such analogies to strengthen their arguments.

Using analogies for explanation requires the ability to think in a concrete, relational way. And the typical thinking mode of the Chinese is holistic and relational. Using analogy for the other two functions is more culture-specific. Chinese culture emphasizes, more than most Western cultures, certain values that make the use of analogy especially appealing.

The Chinese have been aware of these functions of analogy since ancient times. The ancient Chinese philosophers not only used analogies but were very aware of the significance of their use, as we can see in the following story from the third century B.C.:

Someone said to the King of Liang, "Hui Tzu is very good at using analogies when putting forth his views. If your Majesty could stop him from using analogies he will be at a loss what to say."

The King said, "Very well. I will do that."

The following day when he received Hui Tzu the King said to him, "If you have anything to say, I wish you would say it plainly and not resort to analogies."

Hui Tzu said, "Suppose there is a man here who does not know what a *tan* is, and you say to him, 'A *tan* is like a *tan*,' would he understand?"

The King said, "No."

"Then were you to say to him, 'A *tan* is like a bow, but has a strip of bamboo in place of the string,' would he understand?"

The King said, “Yes. He would.”

Hui Tzu said, “A man who explains necessarily makes intelligible that which is not known by comparing it with what is known. Now your Majesty says, ‘Do not use analogies.’ This would make the task impossible.”

The king agreed. [Quoted by D. C. Lao in appendix to *Mencius* (1970), 262]

In this story, Hui Tzu not only persuaded the king to let him use analogies with an analogy (the example about one explaining something strange to another), but explained the value of analogy with analogies (the example about describing *tan*).

Influence of Relational and Holistic Thinking

The fact that the Chinese think in a relational and holistic way may be the most important factor that contributes to the Chinese’s heavy reliance on analogy in persuasion. To think analogically requires the ability to recognize the similarities between things, their underlying structures or inherent patterns. Relational and holistic thinking enhances this ability.

As I have discussed in the previous chapter, the Chinese always regard things as an organic whole and pay great attention to the relationships of the things that make up the whole. This thinking habit makes them especially sensitive to the similarities and dissimilarities of things, and thereby, apt at associating one thing with another.

The relational and holistic thinking habit also means that the Chinese tend to think in a concrete, instead of abstract, way. The fact that the Chinese develop the more

concrete ideographs as their written script, not the more abstract alphabets, is a good demonstration of this point. Analogical thinking is concrete thinking, as it allows thinking in terms of actual similar events or cases. In fact, heavy use of analogies is one of the manifestations of relational and holistic thinking.

Contribution of Cultural Values

Typical Chinese cultural values such as emphasis on history and pursuit of harmony have great influence on the way the Chinese interact with one another. Heavy use of analogy in persuasion is also a product of such values.

Emphasis on History

Of the various analogical devices used in persuasion, the Chinese have a special preference for examples. Reasoning by examples argues from the similarity of similar things, while reasoning by analogies argues from the similarity of dissimilar things (Corbett 1971). The examples the Chinese use are mainly historical examples or events that actually occurred in the past. Moreover, for them, reasoning by historical examples is frequently combined with an appeal to authority. This characteristic has to do with the Chinese's emphasis on history.

For the Chinese, one event that has actually occurred or that can be observed is worth more than a thousand eloquent words. The functions or results of one or more past events is applicable to a current event, and the current event will turn out the same way as the similar past event did. The Chinese believe that underlying all the varied and colorful

phenomena of life are the same universal principles; hence, history tends to repeat itself. Such beliefs explain why Chinese civilization focused so much on history.

In fact, the Chinese emphasis on history and the resulting preference of historical examples are a natural product of their relational and holistic thinking. The Chinese regard history as a whole. They compare history to a river of life that embodies the past, the present, and the future. All events in this whole are interrelated, and they follow the same universal principles. One event or a series of events cause(s) another event. This type of causal relationship directly determines the development of things. Things are also related by their similarity in an analogical way. Similar events cause similar results. Thus, analogical relationships also determine the development of things, although indirectly.

Because things are all determined in some way by past events, and thereby cause, in a sense, is more important than effect, past events weigh more heavily than future ones that are only products of earlier events. Besides, because past events are complete, whereas present ones are not, causal relationships of past events can be identified, whereas those of the present are difficult to recognize. Therefore, one can learn from past events and apply the lessons of the past to the present and future.

Consequently, history for the Chinese is also a mirror. As the well-known statement by King Li Shiming of the Tang Dynasty (618-907) shows, “Using bronze as a mirror, one dresses properly; using people as a mirror, one acts correctly; using history as a mirror, one knows the rise and decline of dynasties.” This wise statement itself is a good example of persuasion by analogy based on relational thinking.

For the same reason, Chinese culture values the historical accumulation of guiding literature. “Good guiding words are a precious resource, and the culture accumulates guiding knowledge as a capital investment and a cultural inheritance” (Hansen 1992, 32). Almost every dynasty produced innumerable historical documents, from the historical records of a kingdom made by court historians and other non-official individuals, to those of a province, a town, made by lesser official historians and others, and to genealogies of clans and families. History provides the Chinese with abundant examples and analogies to use for persuasive purposes.

It is because of this emphasis on history that most examples the Chinese use for persuasive purposes are historical examples, especially when they attempt to persuade people to make a certain decision or to adopt a certain course of action. For the same reason, the power of example is frequently combined with an appeal to authority. This combination means that the number of examples used in persuasion is not very important for the force of persuasion. What counts is the truthfulness or authority of the example itself. This characteristic use of examples is different from the Aristotelian example or induction, where a large number of specific examples is necessary to draw a persuasive generalization from.

Pursuit of Harmony

The Chinese regard harmony as the ultimate goal for all aspects of their culture (Bucknall 1994). This general pursuit of harmony is another cultural value that contributes to the Chinese’s frequent resort to analogy in persuasion.

Pursuit of harmony is deeply rooted in Confucianism, which teaches that social harmony is achieved by every person recognizing and maintaining his or her position in society. The young and inferior should show respect for the elder and superior by obedience. Equals should also show respect for each other by being modest and trying not to embarrass others and themselves by appearing too assertive or aggressive. Any direct confrontation should be avoided. After thousands of years of practice, this cultural value has generated in the Chinese such characteristics as extreme caution, submission, conciliation, and indirectness (Chen 1993). Of these characteristics, caution and indirectness are displayed largely in the use of analogies.

These characteristics also mean that the Chinese are usually very sensitive to their “face,” or the apparent respect other people show for them. An extremely important element in Chinese culture, one’s “face” can be earned, maintained, saved, and lost. Persuasion will hardly be successful if somehow the person to be persuaded feels that he or she has been made to lose “face,” as this feeling often comes hand in hand with resentment.

With its function to allow indirect communication, analogy naturally becomes a frequent means the Chinese use to evade confrontation and to avoid causing others to lose “face.” In this sense, analogy also helps to maintain “harmony” in the society.

Confucian and Taoist Heritage

The influence of the Confucian and Taoist heritage upon every aspect of Chinese culture cannot be over emphasized. As generations of the Chinese study the writings of

the masters, they inherit not only their thinking styles but also their writing styles.

Neither Confucianism nor Taoism use abstract logical reasoning when presenting their arguments. Instead, they both depend heavily on analogies. The reason underlying this phenomenon lies both in the fundamental thinking mode of the culture and the historical circumstances of the time.

This section briefly outlines how historical circumstances led Confucian and Taoist thinkers to present their thoughts mainly by means of analogy. It also provides further insight to the origin and importance of the cultural values discussed in the previous section. Understanding the persuasive styles of Confucian and Taoist writing, the most influential works in Chinese culture, will help the cross-cultural technical communicator to understand better the distinctive feature of Chinese persuasion.

As I have mentioned in the previous chapter, Confucianism and Taoism are two complementary doctrines. One is an ethical and political system for the conduct of public and family life, and the other is a philosophy for the spiritual nourishment of the individual [Waley(b) 1939]. Both were developed to address the same problem: how are people to live in a world dominated by chaos and suffering? However, the proposals they put forward to solve the problem are entirely different. Confucianism bases the answer on a common-sense approach, seeking for concrete social, political, and ethical reforms. The Taoist solution, on the other hand, verges on mysticism and it says: free yourself from the world.

Yet, these two different approaches to the same problem resort to the same means of persuasion, that is, analogy. Only Confucianism mainly uses examples, especially

historical ones, whereas Taoism turns most frequently to analogies, fables, myths, and metaphors.

Historical Background

In Chinese history, the late Chou dynasty (519-246 B. C) was a time of chaos with no respect for the Ritual of the Chou, the etiquette and ceremonies of the Chou dynasty. (Jian 1983). The princes of the states did not obey the king of the kingdom, King Chou. The wealth and land they possessed far exceeded that of King Chou. Consequently, they demanded more power and fought each other incessantly for it. Similarly, in many states, powerful lords were attempting to control their princes, and they fought each other for power and wealth. Moreover, within some big aristocratic families, vassals became increasingly rich and powerful and sought to control, even replace, their masters (Latourette 1946). In a word, this was a time of great disorder.

The frequent fights and changes of power caused great instability of the society, and most people felt extremely insecure. Thinkers like Confucius and Laotse were sensitive to all those changes and the resulting sufferings of the people. They attempted to save the people by curing the diseases of the troubled time. Because the wretched reality did not afford them much hope for a beautiful future, they did not base their political ideal upon the reality (Jian 1983). Instead, they criticized the reality and attempted to build the future on the bases of the past.

Confucian Approach

Confucius, the author of *The Spring and Autumn Annals*, concluded, after examining the history, that the woes and disorder of the reality were due to the breakup of the Ritual of the Chou. The Ritual of the Chou is a set of prescriptions about the rituals, ceremonies, and general etiquette and behavior for people of all levels to follow. The issues it addresses range from proper names, clothing, and color to the type of carriages and size of houses (Jian 1984). To a certain degree, the Ritual had the function of law; those who broke the Ritual were punished. Therefore, the Ritual of the Chou had helped to make the society orderly. People of all levels, the King, the princes, the lords, the vassals, the warriors, and the common people, did what they were supposed to do. This situation presented a sharp contrast with the disordered, chaotic reality that Confucius lived in.

Consequently, Confucius believed that only by returning to the methods of the great sage-rulers of antiquity and restoring the well-stratified order according to the Ritual of the Chou could the problems of the reality be solved (Latourette 1946). He traveled from state to state with a group of his disciples, hoping the rulers would adopt his principles of government. Thus, given the dominant influence Confucianism has had upon Chinese culture, Confucius could be credited as the one who, among other things, started the significant Chinese tradition of holding great respect for the authority of antiquity and being extremely history-conscious.

When Mencius came along more than a hundred years later, the situation was not in the least improved. The Chou dynasty had been replaced by seven powerful

independent states that had resolved their internal fights and each established monarchy. The seven states incessantly fought with one another, each wanting to be the one to unify the kingdom and become the emperor (Jian 1984). The endless wars brought people tremendous suffering, and the people also hoped unification would be soon realized to put an end to this warring state. But how to realize it? What strategies should a ruler take to unify the kingdom? Such topics became the center of the scholarly interest, and around them there arose a large number of thinkers and schools. They traveled around, seeking to persuade the rulers to adopt their views and strategies (Jian 1984). Mencius was one of them.

Understandably, Mencius did not mention restoring the Ritual of the Chou any more. However, still following the approach of Confucius, he held up the sage-kings of the past, the Kings of Wen and Wu of the Chou dynasty, and the still earlier figures, Yao, Shun, and Yu, as models for the present rulers to follow. Like Confucius, he taught that government should not be by brute force but by the good example of the rulers (Latourette 1946). Little wonder that his persuasive argument was so frequently strengthened with historical examples, as we will see later in the example analysis section.

Use of historical examples in persuasion soon became prevalent among the many scholars traveling from state to state, seeking to induce the rulers to employ them to carry out their views of government. These scholars realized that there would finally be a unified empire. However, each built up his own image of the would-be great emperor and then ascribed the qualities to some historical figures, thus creating many new stories

for these historical figures (Jian 1984). Then, they used these figures as models to persuade their rulers.

Taoist Approach

Although faced with the same problem, Taoist thinkers prescribed a different solution. They opposed the approach of Confucianism, with its elaborate ritual, its carefully reasoned codes of ethics, and its earnest cultivation of character (Latourette 1946). Laotse, Confucius's contemporary, held that the woes and sorrows of the reality were produced by human behavior itself. Humans deviated from the laws of nature to establish the standards of right and wrong, good and bad, beautiful and ugly. Thus, fame and wealth became objects of envy. Yet only few people could get them, hence resulting in competitions and fights. Competitions and fights in turn caused the sorrows of the reality.

Laotse believed that people of antiquity followed the laws of nature, instead of human will. Therefore, they were able to live simple and happy lives. Humans must discard those artificial classifications and standards and live according to the laws of nature. Only then could they be free from suffering.

Similarly, Chuang Tzu, who was Mencius's contemporary, rejected all conventional values. In his eyes, "man is the author of his own suffering and bondage, and all his fears spring from the web of values created by himself alone" (Watson 1968, 4). Because his ideas were so different from conventional ones, hence maybe difficult for people to understand and accept, Chuang Tzu turned most frequently to analogy to

present his ideas. His writing was, thus, a collection of analogies, metaphors, similes, anecdotes, myths, fables, and examples. Generally, all Taoist works are full of colorful images. A good demonstration of this point is the fact that there are simple pictorial versions of the works of Laotse and Chuang Tzu, outlining the basic Taoist thoughts.

Examples of Chinese Persuasion Using Analogy

In this section, I will examine a few typical examples of Chinese persuasion. These examples are all model persuasions taken from different types of anthologies of masterpieces or high school textbooks. They also represent several persuasive situations, including interactive argumentation, persuasive presentation, persuasion in solicited situations, and persuasion in unsolicited situations. They all rely highly, if not solely, on the power of analogy. The last part of the section discusses an example of modern Chinese technical writing.

Interactive Argumentation

In Chinese history, Mencius is well-known for his eloquence. He spent a great deal of his life time traveling around, arguing with various philosophical opponents and persuading state kings to adopt his principles of government. Consequently, he provides us with the best example of interactive argumentation based on analogies.

As the most significant representative of Confucianism besides Confucius, Mencius shared Confucius's belief that people are inherently inclined to be good, and he engaged in an argument with a philosopher named Kao Tzu, who maintained that people

were inherently neither good nor bad. The argument unfolds around two rich analogies, the first of which is intended to show that righteousness can be imposed on people, but only unnaturally:

Kao Tzu said, “Human nature is like the *ch’i* willow, and righteousness is like cups or bowls. The fashioning benevolence and righteousness out of human nature is like making cups and bowls from the *ch’i* willow.” (Legge[b] 1960, 394)

What Kao Tzu implies is that human nature can take on qualities other than righteousness, just as things other than cups or bowls can be made out of the willow.

Mencius counter-argues by rejecting Kao Tzu’s analogy as inappropriate:

“Can you,” said Mencius, “leaving untouched the nature of the willow, make with it cups and bowls? You must do violence and injury to the willow, before you can make cups and bowls with it. If you must do violence and injury to the willow in order to make cups and bowls with it, you must in the same way do violence and injury to a man in order to make him benevolent and righteous. Your words, alas! would certainly lead all men on to reckon benevolence and righteousness to be calamities.” (Legge[b] 1960, 395)

Here Mencius rejects Kao Tzu’s analogy on the grounds that, unlike making cups and bowls out of the willow, moral education does not injure a person. If the analogy is inappropriate, so is the argument.

A second analogy, however, is turned by Mencius to his own advantage:

Kao Tzu said, “Man’s nature is like whirling water. Open a passage for it to the east, and it will flow to the east; open a passage for it to the west,

and it will flow to the west. Man's nature is indifferent to good and evil, just as the water is indifferent to the east and west."

Mencius replied, "Water indeed will flow indifferently to the east or west, but will it flow indifferently up or down? The tendency of man's nature to good is like the tendency of water to flow downwards. There are none but have this tendency to good, just as all water flows downwards.

Now, by striking water and causing it to leap up, you may make it go over your forehead, and by damming and leading it, you may force it up a hill; --but are such movements according to the nature of water? It is the force applied which causes them. When men are made to do what is not good, their nature is dealt with in this way." (Legge[b] 1960, 396)

Mencius argues that the inclination of human nature for good is like water's inclination for lower ground, and he enriches the analogy by comparing people becoming bad to water being forced upward against its nature. Just as splashing water causes it to go against its nature, so circumstances can cause humans to go against their nature.

The topic of this argument is of a very abstract nature, but the use of analogies makes the arguments concrete and vivid, hence easier to understand. However, the significance of the analogies in this argument is more than just making the arguments easier to understand. Here the analogies do not function as comprehension aids only. They are the carrier of the argument; their appropriateness largely determines the strength of the argument itself. Therefore, Mencius argues back by targeting the analogies, either rejecting them or turning them to his own advantage. Regardless of how plausible one finds the reasoning, the fact that the serious argument unfolds around two analogies shows how important analogy is in ancient Chinese persuasion.

Cross-cultural technical communicators may come across such analogical argument in their interactions with the Chinese. Pointing out that such reasoning is not logical is undoubtedly not as effective as trying to understand and counter-argue by targeting the appropriateness of the analogies used, as Mencius did in this example.

Persuasive Presentation

In persuasive presentations, the person is expounding his opinions in a convincing way. A majority of Chuang Tzu's writing belongs to this category, and Chuang Tzu mainly uses analogies to expound his philosophical ideas, as we will see in the following three examples.

As I have mentioned in the previous chapter, Chuang Tzu believed that all things in the universe come from Tao and are governed by Tao. For him, human values about things are frequently against Tao, because people often judge things according to their subjective beliefs, instead of following Tao. For example, people tend to praise and love life but fear and hate death, whereas life and death are only different forms of life. Because Chuang Tzu knew the human obsession about the topic of death, he chose this typical topic to expound his views about human beings and Tao.

Chuang Tzu starts with questioning the common belief about wonderful life and fearful death, on the grounds that if we do not know what death is like, we cannot compare it negatively with life. Maybe death is more wonderful than life. He uses an analogy to vividly describe the relation of man's feeling about death and the possible real death.

How do I know that loving life is not a delusion? How do I know that in hating death I am not like a man who, having left home in his youth, has forgotten the way back? (Watson 1968, 47)

Here, Chuang Tzu compares death to one's home. One's life is just like a wander away from one's home. Because no one has ever returned from death to prove, or disprove, this idea, it becomes a great possibility to be entertained.

Then, Chuang Tzu presents a historical story that again works analogically to give an even more concrete idea of the relationship between man's feelings about death and the possible real death.

Lady Li was the daughter of the border guard of Ai⁶. When she was first taken captive and brought to the state of Chin, she wept until her tears drenched the collar of her robe. But later, when she went to live in the palace of the ruler, shared his couch with him, and ate the delicious meats of his table, she wondered why she had ever wept. How do I know that the dead do not wonder why they ever longed for life?
(Watson 1968, 47)

While the previous analogy is based on a possibility, this second one is based on a historical example, which lends support to his argument. Thus, Chuang Tzu uses two analogies to present the idea that man's fear, even hatred of death is wrong as it may be entirely unnecessary. What is implied is the philosophical idea that many human beliefs are wrong in a similar way. In this sense, this whole passage, with its reasoning built

⁶ She was taken captive by Duke Hsien of Chin in 671 B.C., and later became his consort. (Watson, 47).

around two analogies, is one analogy expounding his position that many human beliefs, because they are against Tao, are absurd and wrong.

What is following Tao? Why is it important to follow Tao? What would happen if humans do not follow Tao? What is “non-action”? These are the questions Chuang Tzu foresaw, and he answered them in most parts of his writing by means of various kinds of analogies. For example, the following passage uses a fable:

The emperor of the South Sea was called Shu [Brief], the emperor of the North Sea was called Hu [Sudden], and the emperor of the central region was called Hun-tun [Chaos]. Shu and Hu from time to time came together for a meeting in the territory of Hun-tun, and Hun-tun treated them very generously. Shu and Hu discussed how they could repay his kindness. “All men,” they said, “have seven openings so they can see, hear, eat, and breathe. But Hun-tun alone doesn’t have any. Let’s try boring him some!”

Every day they bored another hole, and on the seventh day Hun-tun died. (Watson 1968, 97)

Here, Chuang Tzu does not provide any explanation but lets the story tell the meaning entirely on its own. Of course, like all other fables, the implication or lesson is fairly obvious. Hun-tun, unlike men, does not have any holes, which is in accordance to nature, or Tao. Ignoring the power of Tao, even working against it by adding holes to Hun-tun only does damage to Hun-tun. That is why people should practice “non-action,” which is following Tao and acting in accordance to Tao. Only then can they enjoy perfect happiness.

In this instance, the persuasive power of the analogy lies in the concrete image that works directly on the senses or the intuition of men. Hun-tun died because of the seven un-needed holes that are forced upon him, even though out of kindness, which is even more tragic. Logical reasoning may come in later, after the implication has been felt, perhaps vaguely as yet, and accepted.

Chuang Tzu's writing is full of such analogies, and in time these analogies, along with many historical stories and traditional thoughts, have been made into succinct idioms. Chinese idioms are an important part of Chinese culture (Ma 1993). There has always been a special Chinese dictionary of idioms. These idioms are not only an important part of the Chinese vocabulary, but also a rich resource of authoritative analogies of persuasion for generations of the Chinese people.

Besides fables, myths, and the like, Chuang Tzu also took analogies from real-life situations, both historical and contemporary. The passage in which he expounded his view on the wise sages is a good example.

Chuang Tzu starts with describing a common, real-life situation. People usually guard against thieves by locking up their valuables in boxes. He observes, "This the ordinary world calls wisdom" (Watson 1968, 107). But what if a thief comes and carries the boxes off? "In that case," Chuang Tzu says, "the man who earlier was called wise was in fact only piling up goods for the benefit of a great thief" (Watson 1968, 107). With this story, Chuang Tzu has set forth his argument in an analogical way: the so-called wise men actually benefit big thieves.

In the following paragraph, Chuang Tzu brings out his argument in clear words:

What the ordinary world calls a wise man is in fact someone who piles things up for the benefit of a great thief, is he not? And what it calls a sage is in fact someone who stands guard for the benefit of a great thief, is he not? (Watson 1968, 108)

He then proceeds to support his argument with a historical example: “How do I know this is so? In times past there was the state Ch’i, . . .” (Watson 1968, 108). He tells how the state Ch’i had been a good, prosperous state governed according to the laws of the sages, where people worked hard and lived in peace with one another. Then, a viscount named T’en Ch’eng murdered the ruler of Ch’i and stole the state. However, this big thief not only stole the state, but also stole the laws which the wisdom of the sages had devised. Thus, although everyone knew that Viscount T’en Ch’eng was a thief and murderer, T’en Ch’eng was feared by small and larger states alike, and he was able to enjoy the rule of the state in peace. In this way, his family held possession of the state of Ch’i for as long as twelve generations.

Finally, Chuang Tzu concludes this story and his argument with a rhetorical question. The rhetorical question asserts forcefully that what happened to the state of Ch’i is a very good example of the sages’ wisdom actually benefiting big thieves.

Westerners familiar with the Aristotelian inductive reasoning might be greatly surprised by Chuang Tzu’s way of supporting his argument. In inductive reasoning, one historical example is far too insufficient to prove a case. However, for Chuang Tzu and the Chinese people who are used to this kind of analogical reasoning, such argument is fairly convincing. First of all, the analogy is very appropriate. The case of the wise man

actually helping the thief by locking up the valuables in boxes has close similarity to the case of the wise sages actually helping the big thief by devising wisdom.

Second, the historical example itself has persuasive authority. The fact that it actually happened in history carries weight. As I have mentioned in the subsection, Emphasis on History, the Chinese usually believe that what happened before would most likely happen again, and again. It is actually a common saying that any event would repeat three times, with three representing many in Chinese culture.

The lesson for cross-cultural technical communicators is that they may also focus on just one good analogy to persuade their Chinese readers, especially one based on a historical example well-known to these readers.

Persuasion in Unsolicited Situations

Persuasion in unsolicited situations refers to cases where one puts forward a proposal that is not requested because, in most cases, the problem one proposes to solve is not yet recognized. In modern technical communication, such proposals are written without the usual request for proposals (RFPs). The proposal writer takes the initiative to identify a problem and convince the reader of the existence of the problem, and further, persuade the reader to adopt the proposed solution as the best to solve the problem. In ancient China, many such proposals were made to a state king regarding the government of the state, often by courtiers or traveling scholars seeking royal employment. While the subject of such proposals may be different from those belonging to modern technical communication, the persuasive means used can be revealing. As we will see in the

following two examples, the Chinese still resort to analogy as their major means of presenting the proposal.

The two examples I discuss here are both recorded in an ancient historical work entitled as *Strategies of the Warring States*. “Warring States” is the name given to the fourth and third centuries B.C., the late years of the Chou brought to an end by the unification of China by the First Emperor (of Ch’in) in 221 B.C. The *Strategies* draw historical persons and events from this period, but are concerned less with the narration of history than with “supplying instances of rhetoric and guile in the service of statecraft” (Birch 1965, 30). The two persuasive passages I will look at here are highly characteristic of the work as a whole, and they are standard pieces in anthologies of Chinese literature.

The first example is a speech made by a traveling scholar named Yin-hou to the king of Ch’in, concerning the dangerous expansion of power of some important people in the state other than the king himself. Because the king did not appear to be aware of the problem, Ying-hou needs not only to call his attention to this problem and its danger, but to do it in a way that would not displease the king. So he starts with an analogy. He first tells the king a story:

Your majesty has doubtless heard about the Spirit of the Grove in the country of Hanker?” Ying-hou asked King Chao of Ch’in. “There lived in Hanker an extremely rash youth who got the Sacred Grove to gamble with him. ‘If I beat you,’ said the boy, ‘you must lend me your genie for three days. If I lose, you may do as you please with me.’ So saying, he cast the dice for the Grove with his left hand and for himself with his right. The Grove lost and lent the boy his genie for three days. But when the

Grove went back to get his Spirit, he was turned away. Five days later the Grove began to rot and in seven it had died. (Birch 1967, 39)

This is both an interesting and tragic story. The Spirit of the Grove unwisely lends out the thing that is most vital to it, which costs its own life. When the king's interest is aroused and he begins to lend him a willing ear, Yin-hou clearly states the theme of his speech:

The country of Ch'in is your majesty's Grove and power is its genie: is it not a course fraught with danger to lend it to others? (Birch 1967, 39)

This statement is shocking to the king, but without further explaining how this story applies to the king, Yin-hou uses another analogy to indicate the seriousness of the problem the king is having:

Now I have never heard of a finger being greater than an arm nor of an arm being greater than a leg, but if such should exist it could only indicate a serious disease! (Birch 1967, 40)

Here, the analogical target is only implied. Yet the seriousness of the problem the king is having is brought out vividly by the truth of the analogical source.

Then, Yin-hou goes on to describe the serious situation the state is in and how this serious situation will harm the state and the king. Still he precedes each of his points with an analogy. He first talks about the danger of the current situation to the country. He compares the country in its current situation to a gourd that many are using to dip water, hence can be easily broken:

A hundred men scrambling to fetch a gourd by cart will accomplish less than one man holding it in his hand and walking purposefully. For if the hundred actually managed to get it aboard their wagon you may be quite sure that the gourd would be split asunder when it arrived. Today the country of Ch'in is used by Lord Hua-yang, by Jang-hou, by the Queen Mother and by your majesty. If it is not to become a gourd with which any may dip his water this should stop. For you may be quite sure that when a country does become a gourd for all to dip with, it too will be split asunder. (Birch 1967, 40)

Then Yin-hou goes on to caution the king about the danger to his kingship. He uses a proverb that includes a set of analogies:

I have heard it said, 'when the fruit is heavy the bough is strained, when the bough is strained the trunk is harmed; when a capital is great it endangers the state, when a minister is strong he menaces his king.' Yet in your city today every man worth more than a peck of grain is the minister's man--this includes your majesty's lieutenants, chancellors, and even personal attendants. Even in times of peace this should not happen, but should there ever be trouble, then I would certainly witness a king standing all alone in his own court. (Birch 1967, 40)

Yin-hou proceeds to express his fear that if this situation is not changed, the future kings of the state of Ch'in will no longer be the king's descendants. By now, the seriousness and danger of the situation is clear enough. However, Yin-hou does not stop here. Instead, he goes one step further to strengthen his argument with the authority of the past. He clearly reminds the king what he should do by setting up historical examples for the king to follow:

Your servant has heard that the awesome presence of great rulers in the past held their ministers in check at home and spread their control abroad over the land. Their government was neither troubled nor seditious and their deputies trod a straight path, fearing to do otherwise. (Birch 1967, 40)

After further description of the current situation, which is the utter opposite to that under the past great rulers, Yin-hou concludes with:

Surely what used to be called 'the road to danger and destruction for state and ruler' begins here. (Birch 1967, 40)

Thus, Yin-hou uses a series of analogies to convince the king of the danger of the current situation of the state. He points out clearly that to safeguard the kingship and maintain the stability of the state, the king should follow the model of past rulers and keep his lords and ministers under check. Otherwise, the country would be split apart as the gourd; the king himself would be harmed as the bough and trunk with heavy fruit, even met an untimely death as the Spirit of the Grove. The series of concrete images and their implications immediately work on both the senses and mind of the listener, and they have such an overwhelming effect that it would take a sage to be unperturbed. For a king who is usually watchful of his throne, they are more than convincing.

In this example, Yin-hou focuses on making the king aware of the problem. He argues that if the king continues to let his power to be abused by others, both his throne and his kingdom will be in danger. He also suggests a solution to the problem, which is to follow the model of the past sage rulers and keep the kingdom under his own control. Yin-hou's analogies work side by side with his argument for his persuasive purpose.

They function to preface and introduce the argument itself in an unsolicited situation.

They also serve to illustrate and clarify the argument. Finally, they help to strengthen the argument with their analogical appropriateness and, in the case of the historical reference, with the authority of the past.

Another typical example of persuasion in an unsolicited situation is somewhat different. In this case, analogy functions as a means to present persuasive argument indirectly in a situation where direct communication would be punished. This example is also from the *Strategies of the Warring States*, and it has always been included in the upper-level high school Chinese textbook.

The queen of the state Chao had just assumed authority when its powerful neighboring state Ch'in suddenly attacked. Chao sought help from its other neighbor, Ch'i. Ch'i agreed to send out its soldiers to help Chao, but only on the condition that the queen's son, Prince Ch'ang-an, be sent to the court of Ch'i as hostage, which was a custom at that time. The queen was unwilling, but her ministers importuned her so strongly that she declared, "Whosoever again urges that prince Ch'ang-an be a hostage, I will spit in his face!" (Birch 1965, 43). This passage records how Ch'u Che, an elderly commander, persuaded the queen by means of analogy.

When Ch'u Che requested to see the queen, the queen guessed his purpose, but granted him her audience, largely out of respect for his old age. However, she greeted him coldly.

Ch'u Che first reduced the queen's anger by talking about the topic of health. When he entered, he walked very slowly and apologized for his slowness and his long

absence from the court on account of his painful feet. He said that it was his own discomfort that had caused his concern for the queen's health. Then he asked the queen about her health, whether she had a good appetite, etc., and used himself as an example to tell the queen how to get a better appetite by walking a short distance each day. By then, the queen's color had somewhat subsided.

Having established a better atmosphere, Ch'u Che started his persuasion. The queen, however, was not aware because Ch'u Che took an analogical approach. Ch'u Che began by asking the queen to take care of his son after his own death:

“Your majesty,” said the commander after a moment, “I grow old and though my son Shu-ch'i is worthless and quite young, I love him greatly and beseech your majesty to grant him the black uniform of the palace guards that he may win fame by risking his life for you.”

The queen readily granted this unexpected request. However, she could not help her curiosity, which gave Ch'u Che the calculated opportunity for persuasion:

“Does a brave man love and cherish a young son then?” asked the queen.

“More than a woman!”

The queen laughed. “Ah, a woman is a different thing entirely!”

“Your majesty,” said the commander, “in my ignorance I assumed you favored your daughter, the Queen of Yen, over Prince Ch'ang-an.”

“My minister is completely mistaken! Prince Ch'ang-an is dearer to me.”

The queen had unwittingly got into a discussion of something verging on the forbidden topic. It is then that Ch'u Che presented his persuasive argument, although still focusing on the issue whether the queen loves the son or the daughter more:

“But when a parent loves his offspring he is ever mindful of planning far in advance for the child,” replied the commander. “When your majesty parted from your daughter you clasped her feet and wept--wept for the distance that would separate you, and it saddened us. Nor did your majesty forget her when she had left, you thought of her at the time of sacrifice and prayed for her. Yet, this prayer was always, ‘let her not return!’ was this not because your majesty was thinking far in the future for her child? . . . praying that her sons and grandsons would succeed each other as kings?”

The queen agreed, upon which, Ch'u Che called her attention to the historical fact that in the state of Chao, and in other states, only few sons and grandsons had succeeded a king to his throne. He went on to give the reason:

“This is why it is said, ‘an error of the present strikes the living, an error for the future strikes sons and grandsons,’ ” said the commander.

“Certainly it is not that among rulers of men sons and grandsons must be bad! Is it not rather that high position is given where no merit exists; that favored treatment is won with no effort, and much wealth has come too easily to hand?”

By this time, the queen must have realized what Ch'u Che was driving at after all, but because the latter's argument was so reasonable and convincing that she was no longer unwilling to listen. Thus, Ch'u Che became more direct:

“Your majesty has raised Prince Ch’ang-an to high position, favored him with the richest lands and given him much wealth, but you do not order him in this present instance to show mettle for his country. When a new royal tomb is raised, what reasons will Prince Ch’ang-an have had to devote himself to Chao? This, your majesty, is why your minister assumed that you favored your daughter, the Queen of Yen, since your hopes for her were of longer range.”

By now, although Ch’u Che said that all he was trying to prove is that the queen favored the daughter more than the son, the queen knew well what his ultimate purpose was. So she said,

“Let it be done as my minister wishes.”

Here, the whole argument is rested on the analogy between Ch’u Che’s care for his children and the children of the queen. Ch’u Che’s care for his son also functions as a live example. The argument is further supported by another two analogies, the comparison of the queen’s treatment of the daughter and the son and a historical fact. These analogies enabled Ch’u Che to make persuasive arguments without directly mentioning the topic, which was forbidden in this particular case.

Cross-cultural technical communicators need to know that indirectness is one of the important characteristics of Chinese communication, largely because the Chinese are very sensitive about “face,” both the “face” of others and the “face” of their own. They tend to dislike being reminded of their problems, especially problems they themselves are not aware of. In such cases, the best approach is to follow what the Chinese usually do in

similar cases: use an analogy to make the case indirectly, as Ch'u Che did in this example, at least, at the beginning of the business.

Persuasion in Solicited Situations

Persuasion in solicited situations occur when people are sought for answers to questions or solutions to problems. They still need to convince others that theirs are the most appropriate answers or the best solutions. As in other cases of persuasion, the Chinese also use analogy as the major persuasive method. The example I analyze here is from *Mencius*, the work that records the master's speeches and activities.

King Hsuan of the state Chi (319-301 B.C.), being proud of a fairly good economic condition in his state, aspired to conquer other states with military power so as to unify the kingdom and become its emperor. He sought advice from Mencius, who at the time was serving as the king's minister. Mencius advocated being a true king, loving and protecting the people, not resorting to military power, as the right course of action to achieve supremacy.

Mencius makes clear his position at the very beginning of the discourse:

The king said, 'What virtue must there be in order to attain to royal sway?'
Mencius answered, 'The love and protection of the people; with this there is no power which can prevent a ruler from attaining to it.' (Legge [b] 1960, 138)

However, King Hsuan wonders whether he can become such a king. Mencius uses a series of analogies to convince the king that he can and that is what he should do.

Mencius first uses an analogy of an ox. He reminds the king that he once ordered his men to release an ox and replace it with a sheep for the consecration of a bell because he could not bear the frightened appearance of the ox. Mencius tells the king:

‘The heart seen in this is sufficient to carry you to the royal sway. The people all supposed that your Majesty grudged the animal, but your servant knows surely, that it was your Majesty’s not being able to bear the sight, which made you do as you did.’ (Legge [b] 1960, 139)

Thus, by reminding the king of his pity for the frightened ox, Mencius endeavors to arouse, in an analogical way, the king’s sympathy and love for all living beings. The analogy also puts the king in a better emotional disposition for Mencius’s address, as is shown in the following passage:

‘Your conduct was an artifice of benevolence. You saw the ox, and had not seen the sheep. So is the superior man affected toward animals, that, having seen them alive, he cannot bear to see them die; having heard their dying cries, he cannot bear to eat their flesh.’

The king was pleased. (Legge [b] 1960, 141)

When King Hsuan asks Mencius what his pity for the ox in sacrifice has to do with the royal sway, Mencius does not answer the question directly. Instead, he gives two more analogies to explain the first one:

‘Suppose a man were to make this statement to your Majesty: “My strength is sufficient to lift three hundred pounds, but it is not sufficient to lift one feather; my eyesight is sharp enough to examine the point of an autumn hair, but I do not see a wagon-load of faggots,” would your Majesty allow what he said?’ ‘No,’ was the answer, on which Mencius

proceeded, 'Now here is kindness sufficient to reach to animals, and no benefits are extended from it to the people. How is this? Is an exception to be made here? The truth is, the feather is not lifted, because strength is not used; the wagon-load of firewood is not seen, because the eyesight is not used; and the people are not loved and protected, because kindness is not employed. Therefore your Majesty's not exercising the royal sway, is because you would not do it, not because you cannot do it.' (141-142)

Here, Mencius argues that one who has the strength to lift the heavy weight of three hundred pounds would have no difficulty lifting a feather and that one who has the good eyesight to see the tip of a hair would see a pile of firewood without effort. Then, Mencius indicates that the king's case is analogous to the two instances he mentions above. If the king has the loving kindness to protect an animal, he could also exercise the same loving kindness to protect his people. Human and animal are alike in the sense that both of them are living beings, but human life is more important than the animal's life. Mencius seems to imply that if the ox, the lower form of life, could be so well protected, how much better the people ought to be protected. Thus, Mencius further points out to the king that, because he has the quality to be a benevolent king, his failure to become such a king is because he would not, not because he could not.

In answering the king's question of how to differ "would not" from "could not," Mencius uses two illustrative analogies:

'In such a thing as taking the T'ai mountain under your arm, and leaping over the north sea with it, if you say to people, "I am not able to do it," that is a real case of could not. In such a matter as breaking off a branch

from a tree at the order of a superior, if you say to people, “I am not able to do it,” that is a case of would not, it is not a case of could not.’ (142)

According to Mencius, the case of “could not” is a case of impossibility, whereas the case of “would not” is a case of unwillingness. Having cited the “could not” and “would not” cases, Mencius points out that King Hsuan’s failure to be a true king does not belong to the “leaping over the north sea” class, but falls into the “breaking off a branch” category. Thus, by means of analogy, Mencius tactfully criticizes the king.

Having convinced the king that he has the quality to be a true king who loves and protects the people, Mencius elaborates on the essence of true kingship. He asserts that, in order to be a true king, one should first be a good son, good brother, and good husband in his own home. In other words, a king should be a kind and gentle man of moral principles. His example will then encourage other people to act accordingly in their own homes. When the individual families have learned kindness and courtesy, the whole nation will learn them; order and peace will then prevail in the whole country. Obviously, Mencius’s idea of true kingship is also analogical, and it is based on the power of model examples.

Then, as an authoritative support of his exhortation, Mencius refers to King Wen of the Chou dynasty, who is known for his moral character and wisdom. Furthermore, Mencius uses another historical example to illuminate King Hsuan’s mind. He tells the king that the secret of the success of ancient saints is nothing but their being good at extending their moral influence. Then once again, he puts the question to the king:

Now your kindness is sufficient to reach to animals, and no benefits are extended from it to reach the people. How is this? Is an exception to be made here? (144)

By means of this rhetorical question, Mencius further enlightens the king that, in order to attain to royal sway, he should be a true king, extending his mercy and kindness to his people fully.

Having expounded the essence of true kingship, Mencius moves on to help King Hsuan review his administrative policies and practices. Still resorting to analogies, Mencius explains to the king that war is not a good course of action to help him achieve supremacy.

First, Mencius compares King Hsuan's military moves to the act of climbing a tree to seek for fish. He implies that the two cases are alike in terms of their absurdity. He also indicates that, in view of their consequences, the war effort is far more dangerous than the fishing effort.

Second, Mencius points out that Chi's attempt to conquer the other states is analogous to Tsou's trying to defeat Chu (Tsou is a minor principality while Chu is a major state). Chi's failure is expected because "a small country cannot contend with a great one, few cannot contend with many, the weak cannot contend with the strong" (146). Therefore, King Hsuan must take the proper course to achieve his goal:

'Now, if your Majesty will institute a government whose action shall be benevolent, this will cause all the officers in the kingdom to wish to stand in your Majesty's court, and all the farmers to wish to plough in your Majesty's fields, and all the merchants, both traveling and stationary, to

wish to store their goods in your Majesty's market-places, and all traveling strangers to wish to make their tours on your Majesty's roads, and all throughout the kingdom who feel aggrieved by their rulers to wish to come and complain to your Majesty. And when they are so bent, who will be able to keep them back?'

Thus, a benevolent leadership is the means to allow the state of Chi to expand its political influence and gain prominence among all states. Here, the series of concrete images makes Mencius's argument both vivid and forceful.

Mencius proceeds to show King Hsuan that the basic requirement of a benevolent leadership is protecting people. Protecting people involves first, providing them with the means of living and, second, instructing them to learn goodness. Mencius makes various practical suggestions for meeting people's living and spiritual needs, which include planting mulberry trees so that everybody may be clothed with silk, raising stock so that everyone may eat meat, and teaching filial piety and fraternal duty in school, and so on. He concludes that "It never has been that the ruler of a state where such results were seen—the old wearing silk and eating meat, and the common people suffering neither from hunger nor cold—did not attain to the royal dignity" (Legge [b] 1960, 149). King Hsuan is fully convinced and asks Mencius to assist him as he tries to carry Mencius's instructions into effect.

Thus, throughout this proposal, Mencius uses numerous analogies, either to make a point, or to explain difficult concepts, or to reinforce his arguments. Mencius uses the series of analogies to gradually lead the king to seeing the point as Mencius himself sees it, hence accepting his proposal. Undoubtedly, as in other examples, analogy also plays a

prominent role in this solicited proposal. Cross-cultural technical communicators can learn from Mencius and use analogies to both explain difficult concepts and reinforce persuasive arguments in their documents.

Analogy in Modern Chinese Persuasion

Although the examples I have analyzed so far are all by ancient authors, analogy still plays a significant role in modern Chinese persuasion. Of course, even in ancient times, analogy was not the only means of persuasion. But it was the most frequently used means of persuasion by the most influential people in the most commonly studied works of the culture. Dominant use of analogy in persuasive acts is part of the cultural heritage of a people that is very conscious and proud of its history.

Modern Chinese people speak and write with many analogies that are not necessarily their own creation. Often, they do not have to know history well to add authority of the past to their point, nor do they have to create their own analogy to illustrate a difficult situation. Chinese children learn in school numerous succinct idioms along with the Chinese characters. These idioms are ready-made analogies accumulated over history. Almost every idiom has a story behind it, which is either historical or fictional. Some of them can be traced back to a traditional thought. Needless to say, a great number of the idioms are derived from the works of the Confucian and Taoist thinkers, such as “rotten wood cannot be carved” and “use a cup of water to quench a big

fire” from Confucius, “three in the morning, four in the evening”⁷ from Chuang Tzu.

Others are from mythical stories, fables, historical stories. *The Chinese Dictionary of Idioms* has a collection of 4,007,800 entries (1984).

With this vast stock of analogical phrases in the language, plus the fact that most of them are composed of four Chinese characters, which makes it relatively easy for ordinary people to recollect and use (Ma 1993), the Chinese, at any time, love to use analogies when they speak and write. In fact, the person who can appropriately use many such analogies in speech or writing is recognized as very knowledgeable and always enjoys some sort of authority, which would certainly aid persuasion.

From classic persuasions, like the ones I discussed earlier, and the use of idioms, Chinese students learn the persuasive power of analogy. In addition, they learn its explanatory power in technical writing. The following example, “Overall Planning,” is taken from the lower-level high school Chinese textbook (Vol. 3). It is in fact an excerpt from the book, *Overall Planning and Supplements*, written by Hua Luo-geng, a famous Chinese mathematician.

According to the introduction, this lesson focuses on teaching students how to use various means to explain things clearly, and the various means are using analogy, providing data, giving definition, using graphics, and making comparisons (Wang L.

⁷ This idiom is from Chuang Tzu’s story about a group of monkeys and their master. The master says to the monkeys, “I give you each three chestnuts in the morning and four in the evening.” The monkeys protest violently. So the master says, “Then, I give you four in the morning, three in the evening.” The monkeys are all very happy and accept the deal. Sometimes, people behave just like these monkeys.

1993, 51). As we will see, although other means are also important, the author's explanation of the concept of overall planning is mainly based on an extended analogy.

The author starts with a brief definition of overall planning and points out the areas where the method is applied:

Overall Planning is a mathematical method for arranging working procedures. It is very widely used, for example, in business management, capital construction, and the organization and management of scientific projects with complex relationships. (Wang L. 1993, 48)

Then, the author describes the analogical situation that he uses throughout the passage:

For example, you want to make a pot of tea to drink. The situation is like this: There is no boiled water; the pot needs washing; the tea-pot and tea-cups also need washing; the fire is on and you have tea leaves. How are you going to do the job? (48)

The rest of the passage explains the concept of overall planning by analyzing and applying the concept to this comparatively simple job of making tea.

The author first lists three possible working procedures and notes that with a job as easy as tea-making, one can see at a glance which is the most efficient method.

However, in the case of a more complex job, one needs to use the mathematical method of overall planning to identify the most efficient procedure of doing the job.

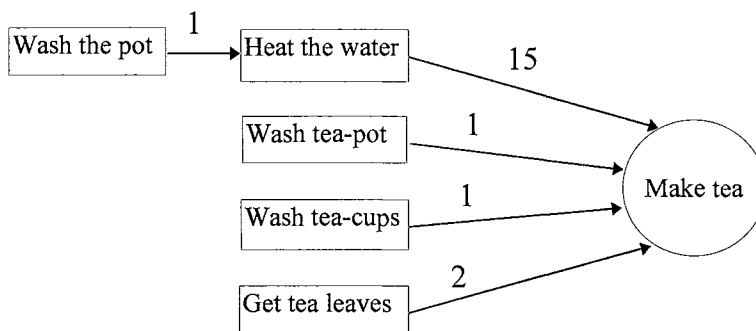
Still using tea-making as an example, he explains that overall planning involves breaking a job into various tasks and identifying the relationships among these tasks:

Without washing the pot, you cannot heat up the water. Therefore, washing the pot is the prerequisite of heating the water. Without water

and tea leaves, and without washing the tea-pot and tea-cups, you cannot make the tea. Therefore, these tasks are the prerequisite of making the tea. (Wang L. 1993, 49)

These relationships are then represented in a graphic:

The numbers above the arrow-headed lines refer to the time required for the particular task. For example, 15 means, counting from putting the water-filled pot on fire, it takes 15 minutes to heat up the water. (Wang L. 1993, 49)



Then, the author explains how by looking at the numbers in the graphic, one can easily find the procedure that takes the least time.

Thus, with this extended example, the author explains the concept of overall planning as something very simple, in fact so simple that “all this sounds superfluous and not worth talking about. We all know it, as well as we know we walk with two legs and eat one mouthful after another” (Wang L. 1993, 48). The author is concerned that the concept may now sound too simple to be worth taking notice of. He uses another analogy to point out the importance of this method in modern industry.

In modern industry, the production process is by no means as simple as that of making the tea. It is far more intricate and complex. There are

hundreds, even thousands, of tasks, and there are all kinds of complex relationships. Frequently, there is the situation where “everything is ready but the east wind.” (Wang L. 1993, 50)

Here, “everything is ready but the east wind” is a popular idiom derived from an historical story recorded in the *History of the Three States* (220-280 A.D.) Zhou Yu, the king of one of the states, planned to attack Chao Cao, the king of another state, with fire. Zhou got everything ready except that there was no east wind so that he could not start the fire. The idiom becomes an analogy referring to the situation where everything is ready but one key element. The author uses this analogy to describe concisely, yet vividly, a situation that may be caused by lack of overall planning. Because the historical story also involves an element of urgency, the idiom also conveys this message, which, in this case, helps emphasize the importance of applying the mathematical method in production processes.

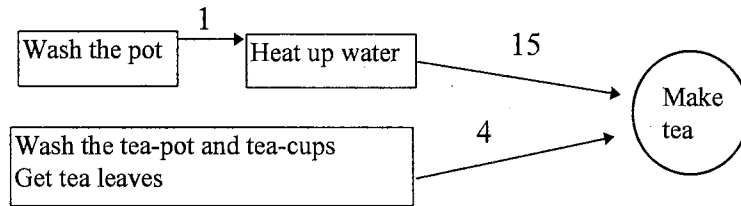
The author completes this paragraph with two further illustrations of this situation:

Because one or two parts are not done, the completion of a complex machine is delayed. Or frequently, because the link focused on is not the key link of the production process, after hurrying to finish this part of the job with three continuous shifts, you have to wait till other parts are done to assemble the machine. (Wang L. 1993, 50)

Only then, the author explains how to do the mathematical work, but still referring to the simple tea-making example:

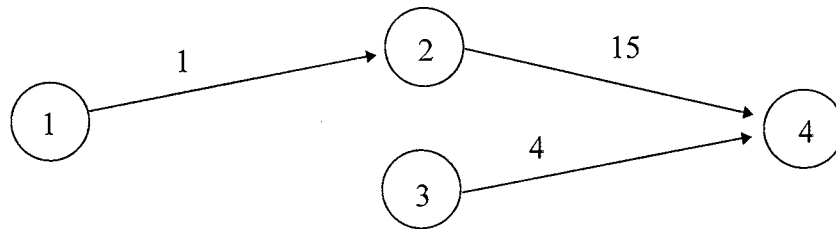
Wash the tea-pot, wash tea-cups, get tea leaves can be done by one person and in any order without affecting the efficiency of the whole job.

Therefore, they can be combined as follows:



Finally, he raises the topic to a more abstract level:

If we use numbers to represent tasks, we can present the above graphic as follows:



[1. Wash the Pot. 2. Boil water. 3. Wash the tea-pot and tea-cups.]

Thus, the author relies mainly on an illustrative example that extends throughout the passage to explain the concept of overall planning. Other means, like providing data and using graphics and figures, are based on this example. It is the example and later, the analogy, that help make the concept simple, vivid, and concrete, hence easy to understand. Further, with this simple situation used as an extended analogy, the author helps the reader to understand the concept more easily by seeing it work as a whole.

This approach may be different from the Western approach. A Western author might deal with this same concept by breaking it analytically into several components, such as analysis, calculation, and planning, and then explaining each component one by one. When creating documents for the Chinese readers, cross-cultural technical communicators can benefit from respecting the Chinese mode of thinking and following the Chinese way of doing things. One example is that they can also use an extended analogy to help explain a difficult concept so that the readers have a good frame of reference and are able to understand the concept easily as a whole.

Summary and Implications for Cross-Cultural Technical Communicators

The previous section demonstrates the importance and prevalence of analogy in Chinese persuasion. Chinese people learn the power of analogy when they are very young, through the study of idioms, an indispensable part of the Chinese vocabulary, and model writings in textbooks. Consequently, although analogy is not the only means of persuasion for the Chinese, the fact that the Chinese have been used to its power and frequent use holds significant implications for cross-cultural technical communicators. Moreover, the reasons I discussed earlier as to why the Chinese rely so heavily on analogy both suggest ways to effectively persuade the Chinese, and point to pitfalls to be avoided when communicating with the Chinese.

The Chinese place great value on history, hence history acquires authority. They use historical examples to strengthen their argument and tend to be easily persuaded by historical examples. Because historical examples hold special authority for them, the

number of the examples does not have to be large. However, the historical examples should come from reliable sources, and they should bear appropriate analogical relationships to the case in issue.

Likewise, the Confucian ideal of a well-ordered, harmonious society has made the Chinese hold special respect for the authority of the elders and superiors, especially the words and examples of the masters of all dominant philosophical schools. Quoting the masters appropriately, either their words or activities, in an analogical way tends to impress them greatly and put them in a disposition conducive to a favorable response. Consequently, we can say that certain cues, peripheral according to the Elaboration Likelihood theory, are in fact central factors when used to persuade the Chinese. Whether in marketing brochures or in proposals addressing the Chinese, cross-cultural technical communicators can make good use of these “peripheral cues” to aid persuasion.

Because the Chinese are used to analogies, they are good at recognizing the relationship between the analogy and the target case or situation. Arguments can, in some cases should, be presented indirectly in the form of analogies. Unsolicited proposals, for example, can benefit greatly from the use of an analogy as a lead-in to avoid making the Chinese readers feel they have “lost face.” Indirectness is an important characteristic of Chinese culture, and it is frequently accomplished through the use of analogies.

The Chinese have recognized and explored the explanatory power of analogies since ancient times. Cross-cultural technical communicators can use analogies of various forms, including examples, metaphors, and similes, to explain and illustrate abstract,

difficult, or strange concepts. Only they need to make sure that the analogies are of a nature that will really help readers of the different culture to understand, not produce extra confusion. In the case of the Chinese, carefully selecting an analogy and using the same one throughout may be more effective. Because the Chinese tend to think in a holistic and relational way, an extended analogy that has elements related to it throughout, thus presenting the concept as a whole, is more suitable to the Chinese thinking.

Meanwhile, I should point out that modern Chinese have been exposed to the Aristotelian logical reasoning. Even for the ancient Chinese, analogy was not the sole means of persuasion. Logical reasoning also played an important part although analogy is the more frequently used means of persuasion than logic. Therefore, cross-cultural technical communicators should consider analogy as one of the powerful means that, along with logical reasoning, works to achieve persuasion for and of the Chinese. In other words, technical communicators writing to the Chinese should take into account and make good use of all persuasive cues, both central and peripheral.

CHAPTER 4

RECOMMENDATIONS FOR CREATING TECHNICAL DOCUMENTS FOR THE CHINESE

In the previous two chapters, I examined two important issues related to communicating technical information to people of Chinese culture: the typical Chinese thinking mode and a distinct feature in Chinese persuasion. The thinking of a people largely determines how they generally process information. Consequently, the fact that the Chinese typically think in a holistic and relational way holds significant implications for cross-cultural technical communicators, and technical communicators should create their documents in a way that best suits and exploits this particular thinking mode. As technical communication is persuasive communication, understanding that the Chinese rely heavily on analogies in persuasion, a feature largely resulting from their particular mode of thinking, also suggests specific strategies and techniques to help communicate effectively to the Chinese.

The present chapter is built on the previous two chapters. In this chapter, I will suggest some practical guidelines that cross-cultural technical communicators should follow in order to produce more effective technical documents with regard to their target audience, the Chinese. I will base my discussion on the understanding of the Chinese's typical mode of thinking and their distinctive persuasive feature.

As a very broad term, technical communication embodies many genres, ranging from the highly persuasive proposals to the very matter-of-fact operational instructions. It is hardly possible to devise specific guidelines for all genres. Consequently, I have attempted to make the guidelines general. Different guidelines, though, may be more applicable in one type of technical documents than another. Cross-cultural technical writers should choose to use these guidelines according to the particular type of document they are creating in a particular writing situation.

Because this study concerns cultural elements only, all the guidelines I suggest here are based on cultural features and are applicable only to Chinese culture. Writers should use them in addition to existing technical writing guidelines, such as “analyze the audience” and “keep the language simple.” Technical writing has many intrinsic characteristics that are shared by its kind in all cultures. For example, regardless of the cultural context, technical documents are reader-centered, and they aim at clarity and correctness. Consequently, even though the existing guidelines are designed for technical writing in English, many of them are applicable to technical writing in other cultures. However, these guidelines do not address cultural factors. Therefore, cross-cultural technical communicators need additional culturally-related guidelines to help them adapt their documents to a specific culture.

The following section has six subsections, each dealing with one culturally-related guideline for writing to readers of Chinese culture. The six guidelines are as follows:

- Use a respectful and friendly tone.
- Use “we” instead of “I.”
- Use the general-to-specific or big-to-small pattern to organize information.

- Use analogies to explain the complex and strange.
- Use analogies to aid persuasion.
- Make plentiful use of visuals.

With each guideline, I will explain the rationale and discuss some related elements to which writers should pay special attention. I will also illustrate the application of the guidelines with an on-going example, the situation of which I will describe toward the end of the first section.

Culturally-Related Guidelines

Use a respectful and friendly tone.

Many scholars in technical communication have pointed out the importance of tone in a technical document (Warren 1985; Anderson 1991; Lannon 1994). The tone writers create in any document indicates the distance they impose between themselves and the reader (Lannon 1994) and the attitude they show toward the reader and subject (Warren 1985). A writer's tone may be formal, semi-formal, informal (Anderson 1991). It can also be personal, impersonal, critical, and encouraging (Lannon 1994). In order to obtain the intended response, communicators should "treat both the subject and the reader seriously and professionally" (Warren 1985, 17), and use a tone that is appropriate for the particular writing situation.

In cross-cultural communication, writers need to consider cultural elements as well and choose a tone that suits the general practice and expectations of the particular culture. In technical documents addressing the Chinese, writers should adopt a respectful

and friendly tone generally used and expected by the Chinese. In the rest of the section, I will first discuss why the Chinese generally use a respectful and friendly tone in writing and how to create this tone. Then I will use a specific example to illustrate how cross-cultural technical communicators can apply this guideline to their documents.

Why the Chinese use this tone

The Chinese use a respectful and friendly tone in writing in order to establish a friendly relationship with the reader based on mutual respect. In Chinese culture, which is highly relationship-oriented, a good relationship is one of the most important keys to success in almost everything. Many western students of China have recognized this point (Seligman 1989; Pye 1982 & 1992; De Mente 1989; Boiarsky 1992; Kenna & Lacy 1994; Abramson & Ai 1994). This emphasis on relationships has to do with the holistic and relational thinking mode of the Chinese and the Confucian doctrine about human beings and society.

Because of those two profound influences, the Chinese generally view social beings not as individuals isolated from one another, but as a part of the whole society and in organic relationships with all other parts making up the society. These relationships include the relationships of parents and children, brother and sister, elder and young, superior and inferior, the powerful and the powerless, the employer and the employee, and that of friends. People play multiple roles that are well defined within these numerous relationships.

These relationships follow a principle of reciprocity. For example, parents should take care of children, whereas children should obey parents and later on take care of them as well; employees should be loyal to the employer, whereas the employer should take care of the employees, and friends should help each other. Consequently, these relationships embody both rights and duties. If people exercise their rights correctly and fulfill their duties properly, relationships among them will become balanced and stable, which benefits everyone involved.

Achieving a harmony of all these relationships is the social ideal of the Confucianists who believe that this harmony will result in a peaceful, orderly society. For the individual Chinese, establishing and maintaining good and proper relationships is one of the three keys to success. The other two are good time and right location, as expounded by Sunzi, the well-known ancient military strategist. The common saying, 和气生财 (Good relationships produce wealth), especially popular among the business people, epitomizes this common belief.

In fact, the Chinese place so much emphasis upon relationships that they usually prefer to do business with friends, not with strangers or outsiders. (Outsiders are people who are outside their relationships and who do not understand or share the same rights and duties.) When they have to deal with an outsider, they attempt to get the new relationship on a good-friend basis as rapidly as possible, so that the outsider will no longer be an outsider. Needless to say, such relationships have a sense of permanency and go beyond the usual short-term business relations.

No wonder the Chinese generally take time to cultivate a solid relationship before seriously starting business negotiations. This practice frequently confuses, sometimes frustrates, the task-oriented western business people (Pye 1982 & 1992; De Mente 1989; Seligman 1989; Engholm 1991 & 1994; Kenna & Lacy 1994; Bucknall 1994). Taking a respectful and friendly tone in technical documents aims to achieve the same purpose, that is, building a solid relationship. It says to the reader, “We want to be your friends, not just business partners.” Cross-cultural technical communicators should follow this general Chinese practice and strive to establish a good relationship with their readers by using a respectful and friendly tone.

How to create a respectful and friendly tone

Respect and friendliness are two different things, with one able to be the basis of the other. When cultivating relationships, the Chinese aim to achieve friendships based on mutual respect and trust. Hence, the tone in writing should be both respectful and friendly. However, respectfulness and friendliness are shown in different ways.

Basically, showing respect in Chinese writing constitutes using the right words and right titles. Using right words means using many 请 (please) when making requests or providing instructions. It also means using the more formal word for “you,” that is, 您 instead of 你. (The difference between 您 and 你 is similar to that between “vous” and “tu” in French.)

Because there is no English equivalent for the Chinese 您, cross-cultural technical communicators may consider adopting more polite forms of a phrase to convey the same

meaning. For example, “Thank you very much!”, instead of a simple “Thank you,” can be a closer equivalent for the Chinese 感谢您! “You would find that . . .” may be a more polite form than the strong and direct “You will find that . . .”

Using right titles means that when writers are addressing a specific person, as in business communications, they should take care to show that they know and respect the person’s title. Chinese society is highly structured, one in which people are generally socialized to respect authority, and those who have authority expect it to be respected. If a person is a director, he or she is called as Director so and so, not Mr. or Ms. so and so, and never just the name. Otherwise, that person is very likely to feel slighted.

However, with increasing exposure to Western culture, more and more Chinese have begun to accept, even follow the Western practice of addressing others as Mr. or Miss. Consequently, cross-cultural technical communicators can address the receiver of a business letter as Mr. or Ms. so and so on the salutation line. However, they should make sure that the person’s right title is included in the inside address. Furthermore, the title of the writer should also be clearly indicated, both in the return address and signature part, and the title should be the equivalent of the title of the Chinese receiver. Otherwise, a higher ranking title may make the Chinese feel power-pressured, (though in some cases, they might also feel honored); a lower ranking title will make them feel slighted: I, (therefore, my company), am not being taken seriously. Such feelings usually lead them to think twice whether they would like to do business with this “disrespectful” person, and his or her company.

Taking a friendly tone means avoiding using a matter-of-fact, business-like tone. Instead, writers should emphasize in their document, for example, a proposal, their concern for the long-term interests and benefits for both parties. If the relationship has just started, they should express their hope for a relationship that goes beyond the present transaction and that will result in a long-lasting friendship. If the relationship is a continuing one, writers may start with the previous successful transactions and emphasize the prospects of developing the relationship further.

As I have discussed in the previous section, the Chinese generally prefer to do business with people with whom they have established relationships. Sincerely setting out to establish good relationships with the Chinese will definitely yield benefits. Even in a comparatively more objective instructions manual, a respectful and friendly tone will result in a camaraderie relationship between the writer and the machines the instructions are about, and the Chinese users. From this relationship, writers will more likely gain users who are loyal, obliging friends, rather than distrustful, sometimes even vindictive, outsiders.

Application

To show how cross-cultural technical communicators can apply this guideline, and others I will discuss in this chapter, I will first describe a hypothetical situation. In this situation cross-cultural technical communicators need to create a proposal, a letter of transmittal, and some promotional brochures.

For the past 15 years, Great Wall Electronics, Corp., has been doing well, and it has just decided to build its own corporate building in Beijing. As a symbol of the corporation, the 9-story building is to equal the best office buildings in the world in both building quality and equipment. An efficient building heating and cooling system, therefore, is one of the musts. Great Wall Electronics is inviting all interested companies to bid for installing the heating and cooling system for the building.

Oklahoma GHP International, Co. is a company specializing in using ground source heat pumps to heat and cool buildings. Unlike most other systems that use fuel as their energy source, the ground source heat pump (GHP) system uses solar energy stored in the ground as the energy source. In winter, heat is extracted from the ground to heat the building; in summer, the process is reversed for building cooling. Believing that this efficient and energy-saving solution has great competitive advantage, the company decides to bid for this contract. Besides, this contract is an opportunity to enter the huge China market. Consequently, a team of marketing and technical writers is assembled to prepare a package to send to Great Wall Electronics. This package includes a letter of transmittal, a proposal, and some promotional brochures.

According to the request for bids, the package is to be sent to Wang He, business manager of Great Wall Electronics. The writer should make sure that in the inside address, the manager's name is correctly spelled and his title clearly indicated. On the salutation line, however, he may be addressed as "Dear Mr. Wang He." Use the full name to show respect, especially the first time his name appears. Later, it is all right to address him by his surname, in this case, "Mr. Wang."

In other cases, the surname may be “He,” as in English names. Traditionally, in Chinese names, the surname always comes first. It is still the case among the Chinese themselves. However, nowadays, with increasing contact with the West, some Chinese print their names in the reverse order if they know English-speaking people may be involved, which makes the case more confusing. Cross-cultural technical communicators need to double check with the Chinese counterpart on this point. To call Mr. Wang He “Mr. He” would be very inappropriate and should be avoided, especially in a written form, where no immediate feedback is available and the mistake assumes a more material presence.

To show due respect for Mr. Wang, and also sincerity, the writers should also make sure that the letter of transmittal bear the signature of Mr. Wang’s counterpart, the business manager of Oklahoma GHP International, Co. His title should also appear in the return address.

Apart from such mechanical considerations, the writer should also write in a polite way, using “please . . .” or “could you please . . .” etc., as necessary. For closing, use both “sincerely and respectfully” to reinforce a friendly and respectful tone.

As part of the content, the writer can also express in the letter a strong wish to establish a long-term relationship with Great Wall Electronics. The proposal may include a section discussing how the relationship of the two companies can continue even after this particular business, and how such an established relationship can benefit both companies.

As the company has successfully installed a GHP system for a five-star hotel in Singapore, the writer should not only include information about this installation in the package, but also emphasize in the letter of transmittal the good relationship it has established with the owner of the hotel. As Singapore has a predominantly Chinese culture, the good relationship established between those two can help convince Great Wall that an equally good relationship may be possible between this Western company and itself.

In the brochures providing information on the GHP cooling and heating system, the designer may consider using some Chinese characters. The title of the brochure, or the key promotional slogan, for example, can take both Chinese and English versions. The Chinese usually interpret such additional efforts as knowledge of, or interest in, even respect for Chinese culture, which tends to create a warm feeling in them. Such efforts also indicate sincerity in the business. Of course, it would be even better if the package includes both English and Chinese versions of every document.

Use “we” instead of “I.”

In Chinese culture, “we” and “I” invoke different responses when used to represent an organization. Cross-cultural technical communicators should be aware of these differences and use “we” instead of “I” when writing to the Chinese on behalf of their organizations or companies.

The Chinese dislike using “I” when speaking on behalf of an organization. This feature has been noticed by quite a few writers about Chinese business culture (for

example, Pye 1982 & 1992; De Mente 1989; Seligman 1989; Engholm 1991 & 1994; Kenna & Lacy 1994; Bucknall 1994). For the Chinese, using “I” would sound presumptuous and immodest, which would arouse in them both disapproval and distrust. Instead, they use “we” to appropriately acknowledge the group effort. Using “we” also lends greater weight to whatever is said or done, because in the Chinese society, the group is more important and more powerful than the individual. Such different meanings implied in the two pronouns are the result of another typical feature of Chinese culture.

Apart from being highly relationship-oriented, the Chinese are also group-centered, which, once again, has to do with their holistic and relational thinking and the corresponding view of human beings and their position in the world in which they live. As I have discussed in Chapter 2, a person in the Chinese society exists as a part of a large group. The importance of the role one plays in the larger group is far more important than one’s importance as an individual.

That “larger group” may have appeared different in ancient China from what it looks like in 1996. In imperial China, the larger group would have been one’s extended family, including grandparents, father, mother, siblings, uncles, aunts, and cousins, all of whom usually lived together in the same house, or the clan one belongs to. In the present-day Chinese society, the group might be one’s nuclear family, one’s class at school, or one’s work unit. The situation varies; the dynamics, however, are much the same no matter what the group is.

The Chinese enter into a kind of compact with their groups. In exchange for obedience and loyalty, they can expect protection and support and be confident that their

well-being will be a matter of concern to the group as a whole. As members of the group, they subordinate their own wills to that of the whole and make decisions based on the best interests of the larger group, not personal interests. Once they make a decision, group members must accept and act on it.

Consequently, in such a group-centered society, individual initiative and achievement are not emphasized, and people are socialized to be modest and obedient. It is the group, not the individual, that is really important. A very illustrative practice is that Chinese business letters usually bear the official seal of the unit, a red, circular stamp, not the personal signature of the writer (Seligman 1989). Using “we” instead of “I” to represent one’s unit or organization is but another illustrative practice of this group-centered society.

Application

To apply this guideline to the hypothetical situation I described earlier, the business manager of Oklahoma GHP International, Co., or the technical writer who is ghostwriting for the manager, should write as a representative of the company. For example, the letter of transmittal may include a sentence about hoping to hear from Great Wall Electronics soon. The sentence should be “We . . .” or “We at Oklahoma GHP International look forward to hearing from you soon,” not “I look forward to . . .”

Likewise, in the proposal, whenever referring to the self, the writer should use “we” as the subject, or “us” as the object. Or to make it simple, just use Oklahoma GHP

International as the subject and object. Avoid using “I” as the subject, unless it is used with the phrase “on behalf of Oklahoma GHP International Co.”

Use the general-to-specific or big-to-small patterns to organize information.

When writing for Chinese readers, cross-cultural technical communicators should use the general-to-specific or big-to small pattern to organize informational materials whenever possible. This pattern best suits holistic thinking, the typical thinking mode of the Chinese, and it has been used frequently in Chinese technical documents, both classic and contemporary.

The general-to-specific pattern starts with the general information about the topic of the document, then gradually moves on to the specifics. When the writer moves from general to specific information, he or she is like a photographer moving the camera from a distant to a close-up view. The general information provides a big picture of the topic, and the close-up specifics are the parts that make up the big picture. The big picture includes the overall information about the discussion, and it provides a reference point, sometimes a foundation, for the reader to understand the specific details.

This organization pattern is in agreement with the holistic thinking mode. People who think holistically tend to always keep the big picture in mind while attending to the various parts in the big picture, and they constantly relate the parts to the big picture. The general-to-specific pattern provides the big picture in the first place, and facilitates the relating process as well.

Many Chinese technical documents, both classic and contemporary, are organized with this pattern. *T'ien-Kung K'ai-Wu*, or *The Creations of Nature and Man* (Sung 1637) is one typical example. *The Creations of Nature and Man* is a well-known classic dealing with Chinese technology in the seventeenth century. It covers practically all the major industrial techniques of its time, from agriculture, textiles, mining, metallurgy, and chemical engineering, to the building of boats and the manufacture of weapons. In the early 1930s, an inexpensive volume of this book was published as “one of a series of books on Chinese culture designed for use by students” (Sun and Sun 1962, ix). Excerpts from the book have been included in high-school Chinese textbooks, from which students learn both functional writing skills and ancient Chinese technology.

All the eighteen articles in this classic are organized in the general-to-specific pattern, which can be illustrated by a brief outline of the first article, “The Growing of Grains.” The article starts with an introduction that points out the significance of the topic and introduces the different types of grains. Then, it is divided into five big sections. Each deals with one of the five types of grains recognized in China at that time: rice, wheat, millet and sorghum, hemp, and legumes. All five sections have a parallel organization.

Take the rice section as an example. This section starts with a categorization of rice, followed by a general discussion of where, when, and how to plant rice. Then, it moves on to more specifics, such as fertilizing the field, ploughing, harrowing, weeding, what may cause rice disasters and how to avoid them, and the various means of irrigation.

In so far as the topics apply to the particular type of grain, all other sections follow this pattern.

The overall structure of *The Yellow Emperor's Classic of Internal Medicine* (Anonymous ?) presents another good illustration of the general-to-specific pattern used in Chinese technical documents. *The Yellow Emperor's Classic of Internal Medicine* is the greatest authority, the most influential work in traditional Chinese medicine, upon which most of the medical literature of China is built (Veith 1949). The book takes the form of a dialogue between Huang Ti, the legendary Yellow Emperor, and his minister, Ch'i Po. The emperor generally poses questions on problems of medicine which the minister answers in long discourses. The minister's discourses are, therefore, typical technical writing pieces where the expert explains a specialized subject for the non-expert.

The discussion proceeds from the relationship of Universe, the macrocosm, and the human being, the microcosm, to the relationship of four seasons and Man's health, to the functions of various parts of the human body, and finally, to the specific illnesses and diseases, including their diagnosis and respective treatment. Here, the earlier chapters provide a general foundation, including the theory and terminology, for the discussion in the latter chapters.

A third example comes from the current Chinese textbook for the junior high school students. It is a lesson that teaches how to describe something by its characteristics and from different aspects, and how to organize the materials in a logical order. The organization pattern used in the model article, "A good tree—paulownia," is

the same general-to-specific pattern. Apart from a brief introduction and conclusion, the article has six paragraphs, each discussing one aspect or characteristic of the tree. The sequence of the paragraphs follows the general-to-specific pattern: distribution, growth rate, rooting, use of wood, use of leaves, and use of flowers. The writer starts with an aerial view and gradually zooms in to examine the smaller parts.

Similarly, when using a spatial pattern, the Chinese tend to start with the whole view or the biggest item and move on to the smaller details. A typical example is the sequence of the characteristics list of a product description. In the product description of the JDYD-I Argon High-Frequency Electric Knife (Research & Production Center of Medical Appliances, Shanghai Jiantong University, date unknown), an implement used in surgery to coagulate blood, the characteristics are presented in the following sequence:

- Overall easy-to-assemble design
- Double argon bottles providing sufficient supply
- Pressure safety protection in the argon transmission system
- Advanced multiple filters
- Reliable adjustment range of the argon flow

At a first glance, this sequence does not seem to follow any logical pattern of organization. A close examination, however, reveals that the writer starts with a general overview of the object, the overall design, and gradually closes up to address the details, which are the transmission, the filters, and finally, the argon flow. Here, the author is still using the general-to-specific, or big-to-small pattern familiar to the Chinese readers.

One way to further help the Chinese to understand and retain the information is to constantly relate the specific parts to one another and to the whole picture. For example, in “The Growing of Grains,” the author always points out, at the beginning of each section, the position of the particular grain under discussion among all grains. Then, in the section, he constantly compares and contrasts that particular grain with the ones that have been discussed previously.

I need also to point out that many guidelines have been established on how to organize informational materials in English technical documents. Brockmann, for example, stated that the writer should organize the information in the ways expected by the audience (1990). The audience’s expected patterns of organization include chronological order, most important to least important order, order of need, order of difficulty, alphabetical order, spatial order, problem-solution order, as well as general to specific order (Felker et. al. 1981; Markel 1988; Brockmann 1990, Anderson 1991; Lannon 1994). The writer should use one or a combination of several such organizational patterns that meet the expectations of the audience and suit the nature of the information.

Most of these patterns of text organization have universal applications, and they can also be used in technical documents addressed to the Chinese. For example, the Chinese also prefer to use the chronological pattern when describing a process, giving instructions on how to perform a task, or explaining how something happens.

On the other hand, the technical writers should avoid using the alphabetical order. The majority of the Chinese do not know English, and the alphabetical order would mean nothing to them. Besides, the alphabetical order would be lost any way when the

document is translated into Chinese. Instead, the writers should use other patterns that have universal meaning, such as most important to least important, most needed to least needed, and of course, the highly expected general-to-specific or big-to-small pattern that suits holistic thinking.

Application

To illustrate the application of this guideline, let me go back to the hypothetical situation and focus on the proposal Oklahoma GHP International is preparing. The purpose of the proposal is to win the bid from Great Wall Electronics for installing the cooling and heating system for the corporate building. One of the selling points of Oklahoma GHP International is that they use a different, more energy-saving system than others. Considering the Chinese typically think in a relational way, the writer can put forward the benefits of the GHP system in relation to other types of systems. Consequently, the proposal includes a great deal of information about how the GHP system works and how it compares with other systems.

The writer can organize the information in a general-to-specific pattern. First, provide the reader with a big picture, focusing on how, by using solar energy stored in the ground, the GHP system works differently from other systems, and thereby can reap more benefits than other systems (briefly list these benefits here). This paragraph is similar to the overview paragraph generally recommended in technical writing textbooks.

Then, discuss the benefits in detail following the big-to-small pattern. Start with environment (cleaner) and resources (energy saving), move on to cost, maintenance, etc.

When describing the system, also describe the system as a whole first, then, move on to the important components, the heat pump exchanger, the heat pump, and the individual controller, etc.

Use analogies to explain the complex and strange.

Because the Chinese typically think in a holistic and relational mode, they are good at using and understanding analogy that recognizes and exploits similarities between things. Besides, for generations, the Chinese have been following the Confucian way of cognition, in which recognizing similarities existing among things is a key point. In school, they learn the method of proceeding from the principles of what is known and following the principle of similarity to investigate the various relations between the known and the unknown, thereby achieving an understanding of the unknown. (The idiom 以此类推 [the rest may be deduced by analogy] is a very common saying in Chinese schooling.) Such cognitive behavior further enhances their ability to use and understand analogies. Consequently, using analogies of various forms, including examples, metaphors, and similes, is an especially effective means of explaining the complex and strange to the Chinese.

On the other hand, using analogies is also a tricky matter for cross-cultural technical communicators. For an analogy to exert the power of explanation, the analogy selected has to be appropriate in the first place. The analogical source has to be something familiar to the reader; otherwise, the analogy would only create more

confusion, and thereby increase the cognitive load of the reader. Consequently, the writer must take great care in selecting an appropriate analogy.

Cross-cultural technical communicators, who are not very familiar with the target culture, should take even greater care when using analogies for explanatory purposes. Unless they are definitely sure what the analogical source means to the target culture, they should avoid using analogical sources loaded with cultural overtones. Instead, they should select concepts and objects with universal meanings. These include objects and phenomena in the objective physical world and things and concepts related to the basic human living. The following case will make this point clearer.

Many Chinese students are studying in the graduate program of the Computer Science Department at Oklahoma State University. Although the native language of these students is Chinese, their English proficiency, especially their English reading proficiency in their own field, is quite high. They do not have much problem reading English textbooks or attending lectures of their English-speaking professors. Yet, I have heard several of them complaining about one textbook because of its comprehension difficulty, and they are full of praise for another textbook on the same subject. I was told the reason why one textbook is difficult and the other easy to understand is that one uses good analogies whereas the other uses highly culture-specific, hence inappropriate, analogies for these particular readers.

Both textbooks, *An Introduction to Object-Oriented Programming* (Budd 1991) and *C++ from the Ground Up* (Schildt 1994), deal with object-oriented programming, which involves some quite complicated concepts. Both resort to analogies to help

explain complex key concepts, such as encapsulation and data inheritance. However, Budd uses things like solitaire and puzzles as analogies to explain these concepts. As these Chinese students have no idea of how to play those Western games, they have to spend more time understanding the rules of the games first, in order to understand the analogies, and finally the concepts themselves. In fact, even some of the native English speakers may not understand the games, which makes the analogies still less appropriate.

An even more problematic analogy used is the international chess game. Because there is a national chess game in China and many of these students know how to play that game, their knowledge about the rules of the national chess game interferes with their understanding of the international chess game. As a result, they find it even more difficult to understand the chess game analogy and, hence, the analogical target, the object-oriented concept.

Schildt, on the other hand, uses very simple analogical sources, things that have universal meanings and that are understandable by nearly everyone of the readership. For example, in explaining the concept of data inheritance, he writes:

A Red Delicious apple is part of the classification *apple*, which in turn is part of the *fruit* class, which is under the larger class *food*. That is, the *food* class possesses certain qualities (edible, nutritious, etc.) which also, logically, apply to its subclass, *fruit*. In addition to these qualities, the *fruit* class has specific characteristics (juicy, sweet, etc.) that distinguish it from other food. The *apple* class defines those qualities specific to an apple (grows on trees, not tropical, etc.). A Red Delicious apple would, in turn, inherit all the qualities of all preceding classes, and would define only those qualities that make it unique. (1994, 8)

When explaining the concept of encapsulation, Schildt uses another good analogy. He describes a situation that is very easy to understand: you order a bouquet of flowers from a florist for your grandmother. You do not need to worry about how the florist will get the flowers to your grandmother. You only need to make sure that the address you give to the florist is absolutely correct (Schildt 1994). With such good analogies, few people would find the concepts still difficult to understand.

In a word, good analogies definitely assist comprehension of the complex and strange, especially with the Chinese, whose typical mode of thinking facilitates the use and understanding of analogies. At the same time, cross-cultural technical communicators should make sure they select the right analogies. Inappropriate analogies would hinder, rather than facilitate, understanding.

Application

Technical writers at Oklahoma GHP International may also consider using analogies to help their Chinese readers at Great Wall Electronics understand the concept behind the ground-source heat pump system. The key concept of this system is energy transfer, not energy consumption as in other types of heating and cooling systems. Instead of producing energy with a lot of energy consumption, the GHP system moves energy from one place to another, with little energy consumption.

If the technical writers are not very familiar with Chinese culture, they might use concepts and objects with universal meanings as an analogical source. For example, they might compare the concept of the ground source heat pump system to that of humans

putting on more clothes when it is cold and taking off clothes when it is hot. The ground is like a dress cabinet. Like the cabinet storing clothes, the ground stores solar energy.

If the writers are very familiar with China, they might also use a culture-specific analogy to illustrate the concept of transfer. The heat exchanger is like the Grand Beijing-Hangzhou Canal. Like the Canal that was built (in 6th century A.D.) to transfer the southern goods to the north, and northern goods to the south, the heat exchanger transfers solar energy from the ground to the house and vice versa, depending on the season and need.

The concept behind the ground source heat pump system is accidentally quite simple. But even with such simple concepts, appropriate analogies can help make the text more vivid and interesting to read. Besides, the culture-specific analogy may arouse a positive feeling in the readers, which will aid persuasion.

Use analogies to aid persuasion.

As I have discussed in the previous chapter, analogies play a significant role also in Chinese persuasion. The Chinese use analogies to start a discourse where direct communication is inappropriate, sometimes even dangerous. Topics that might cause “a loss of face” or embarrassment are discussed indirectly in an analogical way, especially at the beginning of the discourse.

Besides, as an incredibly history-conscious people, the Chinese are extremely proud of their long history of civilization, and they hold a great respect for the authority of the past, and present. Analogies in the form of examples, both historical and live, are

therefore often used as the basis of persuasive reasoning. The analogical reasoning works this way: if a similar past event proceeded in a certain manner, the current event most probably will proceed in the same manner as well; or if the ancient authorities conducted the matter this way, we should too; or if he could do it, I can too, etc. Such analogical reasoning is different from the Aristotelian inductive reasoning. In inductive reasoning, one needs many specific examples in order to draw a generalization. In analogical reasoning, one example would be sufficient for persuasion as long as the example is true and well-documented and bears close similarity to the case in issue.

When seeking to persuade the Chinese in their technical documents, such as proposals or marketing brochures, cross-cultural technical communicators can use the same technique. They can also use analogies to aid persuasion. However, unlike explanatory analogies, which should be universal, analogies for persuasion need to be culture-specific. The writers need to make sure that the analogies they use will really persuade the Chinese readers.

Because a persuasive document may need only one good persuasive analogy that either sharpens a key point or extends throughout the document, writers may take time to do some research in order to find an appropriate and effective analogy. A good example is the family analogy used by the two giant telephone companies, AT&T and MCI. In promotional materials targeting users of the Chinese origin, which contains both English and Chinese versions, both companies use the family analogy. AT&T welcomes the Chinese users to the “AT&T Big Family” (AT&T大家庭). MCI’s Friends & Family

Circle program is translated into Chinese as the “Big Family of Friends and Relatives” (亲朋好友大家庭).

The family analogy is effective because it is based on an understanding of Chinese culture’s emphasis on the family. The family image conveys a feeling of sincerity and friendliness and invokes in the target audience a sense of belonging and appreciation. The sense of belonging is especially important for the Chinese who, as I have discussed earlier, are group-centered.

Similarly, cross-cultural technical communicators should delve into the riches of Chinese culture to look for persuasive analogies. For example, they may spend some time studying the works of the ancient Chinese philosophical masters, such as Confucius and Mencius. Prefacing a document with an appropriately relevant quote of these masters, or using an analogy based on one of the masters’ words, will create a feeling of appreciation on the part of the Chinese readers and help establish a relationship of rapport with these readers.

For example, on one of the title pages for the book *Dealing with the Chinese: A Practical Guide to Business Etiquette in the People’s Republic Today* (1989), author Scott D. Seligman uses a very good quote from *Li Ji (The Book of Rites)*, one of the five Confucian classics. The quote is in both the Chinese original form and English translation: 入境而问禁，入国而问俗，入门而问讳. (If you enter a region, ask what its prohibitions are; if you visit a country, ask what its customs are; if you cross a family’s threshold, ask what its taboos are.) As a Chinese looking at this page, I find the quote effective in three ways. First, the author’s knowledge of Chinese culture arouses

warm feelings of appreciation and respect. Second, the quote perfectly summarizes the theme and purpose of the book. Third, the authority of the master lends further weight to the meaning of the quote, which is also the theme of the book.

The 5,000 year long history of their culture provides the Chinese innumerable historical examples that have become treasured lessons commonly applied in nearly every facet of the Chinese life. Citing a historical example, therefore, is frequently a means of persuasion as well. Cross-cultural technical communicators can also cite such stories or event that have an analogical relation with the situation in issue to lend weight to their persuasion.

Besides, the Chinese are very proud of their own culture, and they generally think their culture is great but difficult to understand for outsiders. Therefore, they would feel greatly impressed if a person of a different culture manifests some knowledge and understanding of their culture. This feeling would certainly aid persuasion.

If the company has had quite satisfactory business relations with the Chinese readers previously, emphasizing such earlier instances can support present projections about future successes. Examples of successful relationships involving other companies will also provide support in an analogical way.

Using the kind of succinct idioms I mentioned in the previous chapter, the ready-made analogies accumulated over history, will also impress Chinese readers and help persuasion. For example, the analogical idiom, 千里之堤，溃于蚁穴 (one ant-hole may cause the collapse of a thousand *li* dyke) can be used to express the meaning that slight negligence may lead to great disaster. Such analogical idioms usually have a story, either

historical or mythical, behind them, which makes the analogies extremely vivid. Besides, because they present the meaning to the Chinese readers as a whole, they have an impact on both the senses and reason of these readers all at once.

However, before deciding on an idiom, writers should make sure that they understand the meaning correctly and that it fits the context. They should check with a native Chinese if possible. Otherwise, if they “show off their proficiency with the ax before Lu Ban the master carpenter” (班门弄斧), they would “incur the ridicule of Dafang the experts” (贻笑大方).

In a word, cross-cultural technical communicators can also use analogical reasoning to help persuade their Chinese readers. However, while analogies for the explanatory purpose should be very simple and concern only the universally understood, such as the most basic aspect of human life, (unless the writer is definitely sure of the implications of the culture-specific analogy), analogies for the persuasive purpose must be culture-specific. Some research in Chinese culture is necessary in order to find an effective analogy for successful persuasion.

Before I conclude this section, I also need to point out the ethical issue involved in persuasion. Persuasion should not be achieved regardless of means. Communicators are responsible for ensuring that all documents in all cultural contexts follow the universal standards of honesty and fairness (Lannon 1994; Perica 1972). When devising an effective analogy, or any other persuasive means, cross-cultural technical communicators should follow the universal ethical standards and treat the subject and their readers with honesty and fairness.

Application

Technical writers at Oklahoma GHP International can also use various forms of analogies to aid their persuasion. For example, they may tell how many GHP systems they have already installed in the United States. The number can support both the benefits of the system and the quality of the company's technology and service. A history of past successes lends support to the projection about the present and future successes.

They may also bring in a specific example of an American office building that has a GHP system installed by the company. For instance, with the GHP system, energy cost in the Waterfront Office Building in Louisville, Kentucky, is \$25, 000 less per month than the adjacent Galt House Hotel, which has an equal amount of space, but a conventional heating and cooling system, etc. (International Ground Source Heat Pump Association. 1995). They may call their readers' attention to the fact that electricity cost in the U.S. is not as high as that in China: the more electricity is used, the lower rate of the cost is, which is just the opposite in China. If an American office building can save that much on energy cost with a GHP system, how much more would a Chinese office building save over a conventional system!

Writers may also use a quote from Laotse to support the concept behind the GHP system. Laotse says, “天之道，取有余而补不足；人之道，损不足以奉有余” (Chen 1988, 346). [It is the Way of Heaven to take away from those that have too much and give to those that have not enough. Not so with man's way: He takes away from those that have not and gives it as tribute to those that have too much) (Lin 1948, 306)]. The

GHP system follows 天之道 (the Way of Heaven), because it transfers the solar energy, which has an inexhaustible supply, and which is available to everybody who has a piece of ground, to meet the heating and cooling needs of the people. In contrast, conventional systems follow 人之道 (man's way), because they consume the already limited gas, or fuel oil, or propane to produce energy for heating and cooling.

In fact, the phrase 取有余而补不足 (take away from those that have too much and give to those that have not enough) has become an idiom well-known to ordinary Chinese people. Writers can use this idiom as a subtitle for their promotional brochure included in the proposal package. To enhance the culture-specific flavor, they may print the idiom in the Chinese original.

Meanwhile, to follow universal ethical standards, writers should make sure that all the figures supplied to show the benefits of the GHP system are true and correct, and all the persuasive means used, including quotes and examples, are really supported by facts. In other words, the GHP system needs to be as energy saving, cost effective, etc. as the document is trying to have the readers believe by all these persuasive means.

Make plentiful use of visuals.

Many researchers have recognized the positive functions of visuals in information processing. Robert McKim, for example, regards visuals as a more concrete language for communication, complementary to text (1980). In technical communication, especially, researchers have advocated the use of visuals for various reasons. Visuals facilitate understanding with their concrete images made of simple shapes and patterns (Kapp

1957; Lefferts 1981; Weiss 1991). Visuals are efficient because they reveal information at one glance, and they are persuasive by lending authority to the information (Killingsworth and Gilbertson 1988). Visuals aid retention (Barton and Barton 1987). Consequently, it may seem superfluous to recommend using visuals in technical documents addressing the Chinese.

Functions of visuals should be considered in the context of the reader. The ability to process visuals may vary with different people. “There are word-readers and diagram-readers” (Weiss 1991, 67). The visual language also has strong cultural implications; the same visual elements may invoke different responses from people of different cultures. Even two people sharing the same culture can see the same visual but think different thoughts because of their diverse past experiences (McKim 1980). Visuals are therefore one of the significant elements to which cross-cultural technical communicators should pay special attention.

Because the Chinese typically think in a holistic and relational mode, and they use logographic symbols, they have developed a superior ability to process visuals. Technical communicators addressing the Chinese can therefore make plentiful use of visuals in the documents. At the same time, when designing visuals for the Chinese, they should take into account some cultural factors. This section first explains the rationale for this guideline, then suggests the kind of visuals that may better suit the Chinese readers, and finally discusses the design elements of shape, color, and text arrangement.

Why use plenty of visuals

As Killingsworth and Gilbertson (1988) have pointed out, visual images present the whole information at once to the viewer, whereas we can only hold several sentences in the mind at once. Besides, with their spatial arrangements, geometric shapes, lines, and arrows, visuals can best depict superordinate and subordinate relationships (DiCecco 1992). These functions of visuals especially agree with holistic and relational thinking typical of the Chinese. The most distinctive feature of holistic and relational thinking is an emphasis on the whole and the various relationships of the parts that make up the whole. Visuals facilitate such thinking.

Meanwhile, studies in experimental psychology also suggest that the Chinese may have superior visual and spatial abilities. It is common knowledge now that the left and right hemispheres of the brain are responsible for different types of tasks. The research of Sperry, Gazzaniga, and Bogen (1969) on split-brain patients provides direct evidence of hemisphere specialization of function. They found that written and spoken English are processed in the left hemisphere, which mainly takes care of analytical and sequential tasks, while the right hemisphere was superior in performing various visual and spatial tasks (Sperry et al. 1969). Their finding receives further support from behavioral research with normal subjects conducted by Hardyck, Tzeng, and Wang (1977, 1978) and Kimura (1973). One cannot help relating the left hemisphere processing of the English language to the analytical and linear thinking typical of the English-speaking people. Language and thinking have an interactional and interdependent relationship.

Similarly, researchers have studied visual lateralization with Chinese characters. However, they found that, unlike English alphabets, Chinese characters, which are typical logographic symbols, are processed in the right hemisphere, not the left (Hirata and Osaka 1967; Hatta 1976, 1977; Tzeng et al. 1977). “Reading Chinese characters is much more like a pattern recognition task, which is presumably carried out in the right hemisphere” (Tzeng et al. 1978, 289). In other words, every Chinese character is like a little image, and reading it requires visual abilities.

The Chinese begin to learn these image-like characters one by one when they are, typically, four to five years old. As a good teaching method, these characters are presented to them as analogical visuals, so that the children not only find the learning process interesting but retain the characters well. (For example, attention is called to the extreme analogical likeness of the character for field, 田, to the actual field.)

Thus, the Chinese begin to exploit their visual abilities very early, although unconsciously, and throughout the rest of their lives, they constantly work with these characters, which means they are using their right hemisphere constantly. Because abilities are usually enhanced with use, it is logical to infer that the Chinese should have very good visual abilities. They should be what Edmond Weiss calls “good diagram readers” (1991, 67). The fact that the Chinese typically think in a holistic and relational mode, instead of an analytical and sequential mode, provides further support for this inference.

As I have demonstrated in Chapter 2, the typical Chinese mode of thinking is reflected in the Chinese language. Holistic and relational thinking led the Chinese people

to develop a highly visual and relational language. Meanwhile, the use of this language, which occurs in the right hemisphere, further reinforces their relational and holistic thinking and enhances their visual and spatial abilities.

Apart from the characters, the Chinese have been using visuals to illustrate terms and actions since ancient times. The well-known *Taijitu*, or the *Taiji* Visual (Figure 2-4 in Chapter 2), which illustrates the interplay of *yin* and *yang*, is a very good example. With its two fish-like shapes, complete with heads, tails, and eyes, the visual appears vividly real and alive. It not only makes the abstract concept concrete and easy to understand, but definitely helps remembering.

Visuals are a part of many classic Chinese technical documents. The seventeenth-century technical document, *T'ien-Kung K'ai-Wu*, or *The Creations of Nature and Man* (Sung 1637), is full of concrete illustrations. The copies on the next two pages (Figures 4-1 and 4-2) are but two typical examples of its total 152 visuals that appeared in its 18 chapters. The two excellent line drawings show clearly and vividly how soil is prepared for planting by ploughing and harrowing.

Consequently, cross-cultural technical communicators can, in fact, should, make plentiful use of visuals when addressing their Chinese readers. At the same time, keeping in mind the distinctive features of Chinese culture and its typical thinking mode, and selecting and designing visuals accordingly will make the visuals in the technical documents even more effective with these readers.

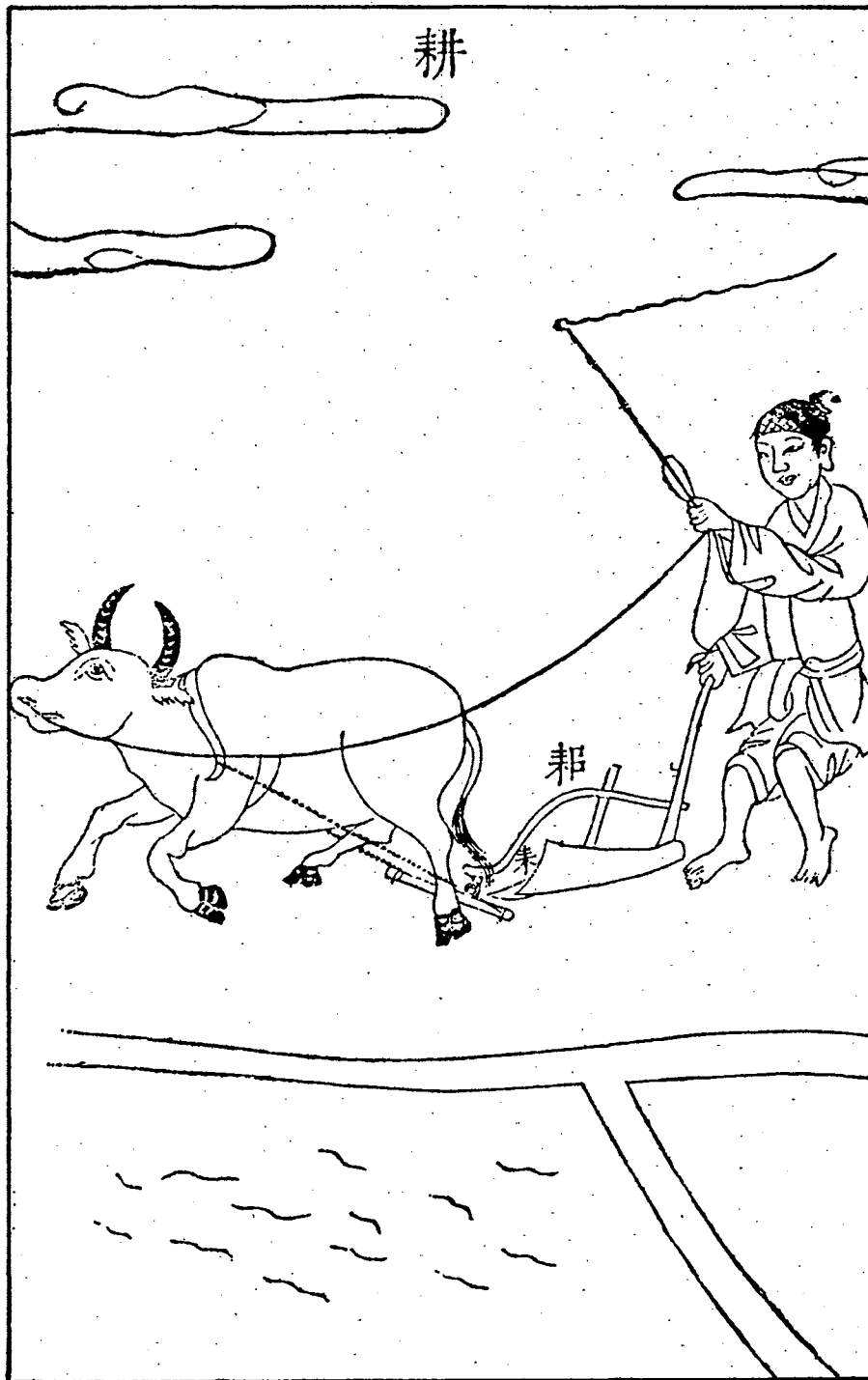


Figure 1-1. Soil is loosened by ploughing.

Figure 4-1. Example of concrete visuals used in a classical Chinese technical document.

Source: Sung, Ying-Hsing. *T'ien-Kung K'ai-Wu*. Trans. by E-Tu Zen Sun and Shiou-Chuan Sun. University Park and London: The Pennsylvania State University Press, 1966. p. 5.

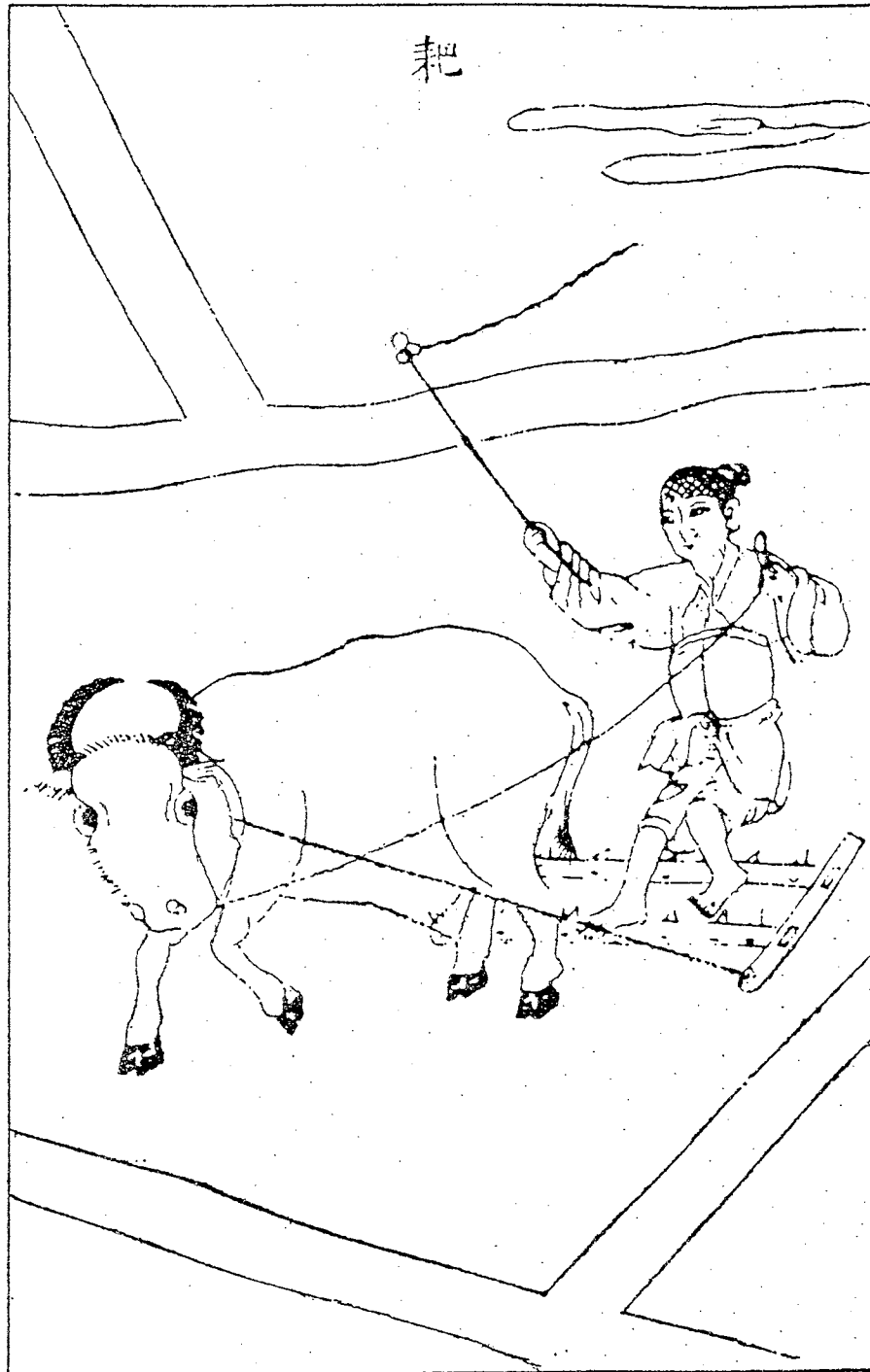


Figure 1-2. Soil is broken into fine particles by harrowing.

Figure 4-2. Example of concrete visuals used in a classical Chinese technical document.

Source: Sung, Ying-Hsing. *T'ien-Kung K'ai-Wu*. Trans. by E-Tu Zen Sun and Shiou-Chuan Sun. University Park and London: The Pennsylvania State University Press, 1966. p. 7.

What type of visuals to use

Visuals can be abstract even as words can be abstract. For example, charts, graphs, diagrams, and schematics are more abstract than orthographics projections, perspectives, or photographs (Mckim 1980). Similarly, visuals have also been differentiated into the concrete iconic and more abstract digital types (Hartley 1985; Brockmann 1990). Visuals of the iconic type, such as line drawings and photographs, reflect reality, and those of the digital type do not.

For readers of Chinese culture, writers should try to use the more concrete visuals, or the iconic ones. As I have discussed in the previous chapter, the Chinese tend to think analogically, which is concrete thinking, in terms of the objects or events in the real world. Concrete thinking is one of the manifestations of relational and holistic thinking. The examples I mentioned earlier in this section are all concrete visuals.

When designing visuals for the Chinese readers, writers can take care that the visuals clearly reveal the relationship between the whole and the parts. For example, a line drawing of a machine part should not stand all by itself, separated from the whole machine. An arrow may be used to indicate where the enlarged part belongs in the whole machine. A pie chart with a piece of pie slightly separated but still clearly a part of the whole pie is another example that conveys the relationship of the part and the whole.

Design elements—shape

Culture, along with background, accumulation of experiences, is critical for interpretation of visual images (Forsdale 1981; Griffin et al. 1994). Visual shapes have different connotations for different cultures. Chinese culture favors the circle or the round shape because it represents wholeness. All words and phrases associated with this shape denote features and qualities that are good and desirable. Besides its literal meanings of round, circular, and spherical, circle (圆) also signifies fullness, completion, satisfaction, and tactfulness. For example, there are common phrases like 圆满成功 (a complete success), 圆满的答案 (a satisfactory answer), 圆润的声音 (a sweet, mellow voice), 圆熟 (skillful; proficient; dexterous), and 圆通 (flexible; accommodating).

It is also common knowledge among the Chinese that the round shape symbolizes perfection, harmony, togetherness, and good luck. Considering the fact that the circle is the best representation of the whole, such extensions of meaning are only natural for a people whose typical thinking is holistic. It is the wish to achieve all those good things that brings the Chinese families all over the world together under the Mid-Autumn moon (August 15th on the lunar calendar), eating round-shaped moon cakes while admiring the perfect full moon up in the sky. Similarly, for the Lantern Festival (15th of the 1st lunar month), they make sweet balls of glutinous rice flour.

If we place the perfectly round shape on one end of a continuum (See Figure 4-3 on the next page), then the shape on the other end is the triangle, as the round curves gradually straightens into sharp corners.

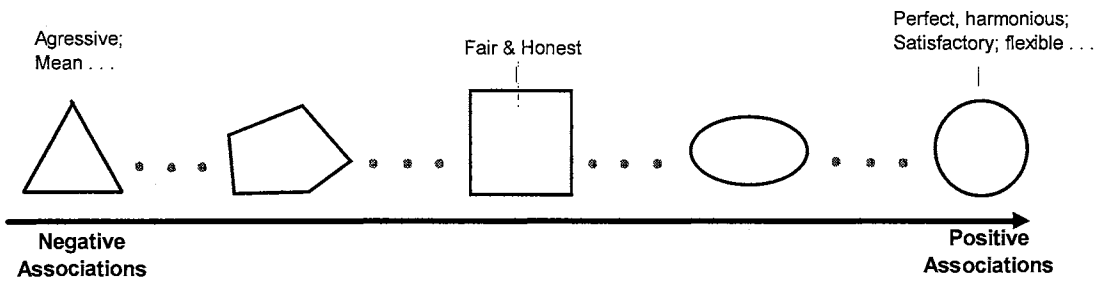


Figure 4-3. Continuum of shapes in terms of associations.

In Chinese culture, the sharp angle (尖角) is traditionally associated with negative features and qualities. A person described as a 尖角蛮石 (craggy rock with sharp edges) is somebody who does not fit in, always hurts others, and is very difficult to deal with. A person who is 尖刻 is acrimonious, biting, and mean. Besides, sharp angles are associated with aggressiveness, which is also an undesirable quality in Chinese culture.

Such positive and negative connotations associated with roundness and sharpness are deeply rooted in Chinese culture. As I have discussed in the previous two chapters, the ultimate goal for the Confucianists is perfect harmony, and the circle is unquestionably the best shape that symbolizes perfect harmony. This perfect harmony is achieved through the interaction of *Yin* and *Yang*, which is symbolized by the *Taiji* visual. In their day-to-day interactions, people are supposed to follow the doctrine of mean, so that they would not disrupt the harmonious balance with any kind of extremes.

Cross-cultural technical communicators should be aware of these cultural implications. Then, when using shapes in visual design, for example, when designing a logo, they may select those shapes that have the right connotations. Even if with a flow

chart, where it is usually necessary to use several different shapes, they should try to use shapes toward the circle end of the continuum and avoid the triangle and the shapes close to it. Otherwise, they may unknowingly produce undesirable consequences.

Design elements—color

Color is becoming an increasingly significant element in visual design, especially in the case of online documents, where the use of color does not incur additional cost. Color can play many functions in both document and graphic design, such as highlighting important items, setting different items apart, grouping similar items, making the page or graphic more visually appealing. Consequently, one cannot discuss visuals without discussing the color element. Like visual shapes, colors are also invested with great cultural implications, which, if not careful, may cause problems for cross-cultural technical communicators.

When creating documents addressing the Chinese, the writer should be aware of the cultural implications of at least four colors and avoid using them in the wrong context. These colors are golden yellow, red, black, and white. While golden yellow and red signify only positive meanings, black and white have both positive and negative implications, depending on the context in which they appear.

Golden yellow is the royal color of Chinese culture. In old dynasties, it was used exclusively by the kings. The king's robe, especially, was in golden yellow. Others would have incurred capital punishment if wearing or using this royal color. Because of this historical fact, golden yellow has always been associated with wealth and rank and

sumptuousness. Products wrapped in this color, or with golden yellow words imprinted on the wrapping usually convey to the Chinese an image of good quality and high class.

Red is warm, happy, and lucky. It is used profusely on celebration and festival occasions, from the high-hung lanterns to gift wrapping papers, and to the cover of various certificates. On such occasions, golden yellow and red are often combined to enhance the atmosphere of festivity. For example, many greeting cards for the new year are set in these two colors, often with red characters on a golden yellow background, or in a golden yellow frame or border.

For mourning, the Chinese use both black and white. They wear a black cloth band on their left arms. Women also wear a little white flower on their hair. It is also a common practice for people to send white flower wreaths to show mourning and express condolences. These white wreaths are placed around a picture of the deceased that is enlarged and framed in heavy black. Traditionally, men also wrap a white cloth band around their waist, and both men and woman wear black cloth shoes with a piece of white cloth roughly stitched onto the front surface. Nowadays, these latter expressions of mourning have been abandoned except in some of the rural areas.

Black and white are thus closely associated with mourning and death. However, outside the mourning context, white also signifies purity, and black dignity. It is perfectly appropriate to use either of these two colors. For example, at wedding ceremonies, more and more Chinese brides are dressed in white and the bridegrooms in black suit. Still, in any other context but mourning, do not use a heavy black border to frame a white area. Such an image suggests death, hence ill luck. (A thin black box, of

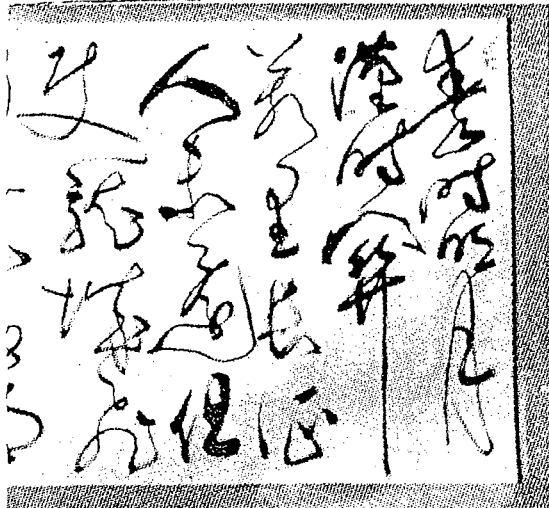
one point size, is all right, because the taboo is on a heavy black box around a white area.)

The meanings of these four colors are strictly contextual, and they cannot be misused in the wrong context. For example, it is definitely not appropriate to bring red into a mourning situation. Similarly, a joyous occasion should not be dominated by black and white colors. Other than such contextual considerations, technical communicators may use any color or combination of colors, as long as they are visually appealing, and they follow other established guidelines for using color in English technical documents. They can also use the same conventional colors for international symbols, such as using red for “stop” or warning, and green for “go ahead” or OK.

Design elements—text arrangement

Another element writers may consider when designing visuals for a Chinese audience is the spatial arrangement of the text. While English is written only from left to right, Chinese can be arranged both horizontally and vertically, as is shown in Figure 4-4 on the next page. This feature of the language orthography has both positive and negative implications.

The positive implication is that the writer has more choice in text arrangement. Because the Chinese are also used to reading from top to bottom, writers can consider arranging the text vertically without worrying about whether reading efficiency may be compromised. For example, instead of putting the caption at the usual position, below a picture or figure, they may put the caption in an upright rectangular text block, with only



老耘书

(A)

梨园剧场

五

周

岁

亦木

金秋 10 月，梨园剧场迎来了它的 5 周岁生日。1990 年 10 月 8 日，北京前门饭店和北京京剧院实行文企联姻，创办了北京第一家京剧艺术厅。5 年来，演出近 2000 场次，接待中外宾客近百万人次，年平均上座率 70% 以上，营业额累计超过 1700 万元，获得了社会效益和经济效益双丰收。

不久前第四届世妇会在北京召开，许多外宾趁此机会前来观赏京剧演出，有的甚至从怀柔赶来，为一饱眼福而乘车往返上百公里。

“曼舞清歌讴盛世，铜琶铁板震京华”，这里看不到京剧危机，相反，良好的演出数量和服务质量所带来的社会效益和经济效益使得剧场兴旺，京剧兴旺。

梨园剧场 3590 平方米的建筑面积，集演出厅、展示厅、展卖厅三位一体。演出厅分前后两区，前区设有八仙桌、太师椅，后区设有长排沙发椅，座席逾千。展示厅通过文字资料和实物资料向宾客展示京剧的发展简史和名家名剧的风采。展卖厅经营中国工艺品，特别是具有京剧特色的工艺品，如扇面、脸谱等，同时出租戏装、头盔，宾客可以化妆拍照，票友还可以日场登台表演。

小小剧场，三代同堂，老中青各年龄段的京剧表演艺术家和菊坛新秀大多在此亮相：谭元寿、梅葆玖、马长礼、杨少春、张四全、叶红珠等。中年演员在此延长了舞台生涯，青年演员在此得到了锻炼和提高，为来日挑大梁作着准备。

梨园剧场的观众，大多是对中国历史、文化和京剧唱腔知之甚少的外国旅游者，为使客人看得懂、爱看，演出剧目以武戏、猴戏为主，适当安排文戏。为使客人容易进戏，印制了中英文节目单，并投入十几万元制作了中英文电子字幕机。为使客人坐得住，不“抽签”，演出时间压缩到 75 分钟左右。

“一年四季，每晚有戏，专演京剧，独此一家”，梨园剧场满足了外宾的“登长城，吃烤鸭，看京剧”的三大愿望，连续 3 年被北京市旅游局授予“涉外饭店最佳晚间活动奖”。慕名而来的贵宾有立陶宛共和国总统、苏里南国总统、秘鲁总统、爱沙尼亚共和国总统、毛里求斯共和国总统、牙买加政府总理和外长、蒙古人民共和国副总统、老挝议会主席、黎巴嫩社会进步党主席等，另有几十个部长级以上的代表团光临梨园剧场。

京剧——外国人眼中的“中国功夫”，集歌舞、服饰、历史、民俗、风情于一身，充分体现了中华文化的精髓。随着梨园剧场年复一年的对外开放，必将有更多外国朋友得以了解中国的京剧。通过了解京剧，外国朋友可以更好地了解中国。

然是一重要端绪，但持久不衰的魅力，实在



由美国引进的十大大片陆续在国内上演，国人的惊愕，是出乎意料的。其中，《真实的谎言》在北京卖到六十元一张票，尚不能稍解其拥挤于万一。或以美国技术发达，巨片的造成，全由于科技发达而领风骚，此固

(B)

演员要

多一点内涵

伍立杨

境、演员到底有多少呢？我们似乎不太敢作乐观的估价。

与此相反，我们提到美、日、法的一些演员诸如贝尔蒙多、施瓦辛格、史泰龙、高仓健、阿兰·德隆、英格丽·褒曼、简·方达……以及国内从前的赵丹等人，总使我们缅怀良多，禁不住记起一段情节、一种境界，以及一句恒久难忘的台词，甚至眼角眉梢一个足以传神、传情的细微动作，即使人到暮年，也还油然浮现一个艺术深入人生的有力有趣的片段。

可以说，人物的气质，是电影艺术的内涵的中心，中国的写意画，讲究一笔下去，满纸的气氛氤氲立刻浮现；第一流的京剧名角，往台中央那么一站，则满台的气氛都被他烘托出来。电影也不例外，作为以表演为主的综合艺术，各方面都应应以人物动作（表演）占有的

1.31%：平均年龄 35 岁，男 65%，女 35%。

Figure 4-4. Chinese text in horizontal (A) and vertical (B) formats. Source: People's Daily (overseas edition), Oct. 21, 1995. Supplements.

one or two words each line, placed side by side with the picture or figure. Such arrangement may be especially useful where the visual is narrow and long, or where the viewing area is in a landscape mode, like the computer screen.

The negative implication is that writers may need to provide a clearer cue for the point of entry on a page. The English-speaking reader's normal reverse S-shaped eye movement, from top left to bottom right, is only one of the two types of eye movement of the Chinese readers. The vertical format of the Chinese text is read from top to bottom, right to left. Usually, with a page dominated by text, this other type of eye movement would not cause any problem. The horizontal format of the text would automatically guide eyes to move from left to right.

However, problems may occur when a page is dominated by pictures or visuals, as in a pictorial. In such cases, writers may need to provide a very clear cue as to where to start on the page to prevent any possible confusion. For example, numbering the visuals in an eye-catching format is only one of the simple means of pulling the eyes of the reader to the proper entry point.

In sum, when creating technical documents for the Chinese readers, cross-cultural technical writers may include many visuals to explain concepts and actions and to help these readers to understand and remember the materials. However, when designing visuals, writers should consider the various culture-specific elements such as the readers' particular thinking mode, the cultural associations of shapes and colors, and their habitual eye movement on reading. Only when they take these elements into account and design

their visuals accordingly, can they create really effective visuals and avoid producing negative results.

Application

Writers of Oklahoma GHP International should use as many concrete visuals in their documents as possible. For example, they may use both pictures and line drawings to show the ground source heat pump system. Pictures can show how the system looks, and line drawings can show how the various components fit and function in the system. Both types of visuals can be used in the brochure. Writers may also include in the package fact sheets of their previous installations with pictures of the buildings and tables showing the space of the buildings and their savings.

When designing the flow chart to show the various steps they will take to install the system, the writers should avoid the sharp shapes such as triangle, but use the circle, and other shapes closer to it on the continuum. So the flow chart may include such shapes as the circle, the oval, the square with rounded corners, the square, and the rectangle with rounded corners. They may also use the same light black box, instead of heavy ones, to enclose all their graphics in the proposal.

They may find it a challenge to design their promotional brochure, because they want to include Chinese characters as well. The company may not consider it necessary to spend extra money on creating a two language (English and Chinese) brochure; the writers may at least put in Laotse's saying, 取有余而补不足, in both Chinese and English versions, to lend authoritative support and to add a warm cultural touch. The fact

that Chinese can be read both horizontally and vertically provides some design flexibility as well. Besides, where the space is tight, they may arrange a caption vertically side by side with the picture or graphic.

When choosing colors for the brochure, writers should definitely not color the border in heavy black, if they are going to use a border for the brochure. Other than this taboo, writers may choose whatever colors that they normally think would be appropriate for such subject, such as blue, orange, etc. However, follow existing guidelines on use of color, such as using no more than 5 colors, because too many colors may be distracting to the reader (Rubens 1988). Writers should not use red and golden yellow just because they know these two colors have positive associations for the Chinese. They need to consider the particular occasion and the subject matter as well.

Conclusion

This chapter discusses six guidelines that cross-cultural technical communicators may follow when creating documents for Chinese readers. These guidelines are derived from an understanding of the significant cultural features of the Chinese people covered in the previous two chapters. They include holistic and relational thinking, focus on relationships, analogical reasoning, respect for authorities, emphasis on history, and the visual and relational character of the Chinese language. Explanation of the guidelines brings in additional elements, such as focus on the group and cultural implications of certain colors and shapes. Consequently, although, there are only six guidelines, they

involve many cultural elements and certainly a great deal of information about Chinese culture.

The guidelines also cover a considerable number of elements usually involved in a technical document, ranging from tone to organization to persuasion to visuals. Knowing these guidelines and understanding their reasons will help cross-cultural technical communicators to develop more effective documents suited to the readers of Chinese culture.

At the same time, writers should remember that guidelines are only suggestions, not rules (Anderson 1991). Writers need to use good judgment when applying them in their particular writing situations.

CHAPTER 5

CONCLUSION

As China's immensity and rapidly growing economy attract more and more international investors, manufacturers, and other business people, the need to study how to communicate technical information to the Chinese grows. Chinese culture in many ways is very different from Western cultures. In order to produce technical documents that effectively address the Chinese, cross-cultural technical communicators need to understand the culture, especially its thinking and distinct persuasive techniques. Practical guidelines based on such an understanding are especially needed to help cross-cultural technical communicators to adapt their technical documents to the cultural and cognitive features and capabilities of the Chinese reader.

Yet, despite the need, until the present study, no work of cross-cultural technical communication involving Chinese culture exists; nor are there guidelines to help English-speaking cross-cultural technical communicators with the challenging task of communicating to readers of this different culture. This study meets the need of reality and fills a void existing in international technical communication.

Thinking mode and persuasive features are two important elements that are closely related to technical communication. Thinking is the fundamental basis of information processing, a crucial part of technical communication. Technical

communication is also persuasive communication, which in a cross-cultural context, is even more true. This study focuses on these two important elements of technical communication in its examination of Chinese culture. The examination results in six practical guidelines for cross-cultural technical communicators writing to the Chinese.

By briefly examining five aspects of Chinese culture, including native Chinese philosophy, the fundamental Chinese world outlook, the Chinese language, Chinese painting, and the contemporary Chinese model of morality, the study demonstrates that Chinese culture is dominated by holistic and relational thinking.

Such a mode of thinking of Chinese culture, different from the typical Western mode of linear and analytical thinking, has profound implications for cross-cultural technical communicators creating documents for the Chinese. In order to make their documents effective, cross-cultural technical communicators need to create their documents in a way that suits the cognitive features of their Chinese readers. The study, therefore, takes a step further. Based on the understanding achieved about the Chinese mode of thinking, it develops guidelines for organizing information, explaining the strange and complex, and using visuals when creating technical documents addressing the Chinese. Examples from existing Chinese technical documents both illustrate and support these guidelines.

The Chinese holistic and relational thinking has also produced a distinctive feature in Chinese persuasion, that is, heavy use of analogy. The study demonstrates the importance and prevalence of this feature by analyzing Chinese persuasions in a variety of situations. Because analogical thinking recognizes and exploits similarities between

things, analogy used in Chinese persuasion takes a broader sense. It includes not only cases where *a* is to *b* as *c* is to *d*, but also uses of metaphors, similes, especially historical examples.

This feature of Chinese culture suggests that what Petty and Cacioppo (1986) define as central and peripheral cues for persuasion in their Elaboration Likelihood theory needs to be considered in a cultural context. Peripheral cues in one culture may be central cues in another. For Chinese culture, analogies of various kinds play a significant role in persuasion. This understanding of the Chinese persuasive feature suggests specific strategies cross-cultural technical communicators may take to persuade their Chinese readers. The study summarizes the strategies in the form of a guideline as well.

Discussion of Chinese thinking and persuasion has also brought in a few important Chinese cultural values that have implications for cross-cultural technical communicators. For example, the value of history and age explains the power of historical examples and authority in persuasion. The value of harmony leads to an extreme emphasis on relationships and the interest of the group, as well as an excessive concern about one's "face." The study also provides guidelines for cross-cultural technical communicators based on the understanding of these cultural values.

Thus, the dissertation provides a good understanding of Chinese culture, focusing on thinking and persuasion, which are two important elements in technical communication. Further, based on this understanding, it develops six well-supported guidelines. These guidelines will provide immediate help for cross-cultural technical communicators writing to the Chinese. They will help the communicators to adapt their

technical documents actively to the cultural and cognitive features and capabilities of the Chinese readers, thereby making their documents more effective.

The study also lays a foundation for further guideline development. With the understanding provided by the study and the huge amount of information that is the basis of the understanding, along with their own practical experience, cross-cultural technical communicators can develop additional guidelines to address issues arising in the localization process.

As a preliminary study, this dissertation serves as a starting point for further research as well. Communicating technical information to readers of the Chinese cultural background is a fascinating field involving many issues. Because of limited time and resources, I was only able to cover a very small part of it and that in a general way. However, this generalness is sometimes necessary to provide a foundation for further study.

One immediate next step, for example, may be to test the guidelines with empirical study. Until they are empirically proved, these guidelines remain recommendations or well-supported hypotheses, as is the case with many other guidelines presented in the field of international technical communication.

More research is particularly needed with regard to the use of visuals. Questions for further study include how the Chinese actually process visuals, whether differences exist in the way the English-speaking people and the Chinese process visuals, how visuals function in Chinese technical communication, what are the specific functions of specific types of visuals, what type of visuals is more persuasive for the Chinese, what

type least persuasive, whether they function entirely the same way as those in English technical communication, etc.

Another study may be to do a series of comparative studies of the English and Chinese technical documents, each focusing on a specific genre, such as the user manual or proposal. Such study may uncover culture-specific features of the correspondent Chinese document and result in more specific guidelines for cross-cultural technical communicators.

Although technical communication programs still need to be established in Chinese colleges and universities, China has begun to be aware of the importance of technical communication. There were already Chinese technical communicators participating in an international teleconference hosted by Germany in 1995, and a Taiwan branch of the Society for Technical Communication has already established (Warren 1996). There are STC members in Hong Kong as well.

Under such conditions, and with the role of the “Greater China” in world economy growing increasingly important, research in both Chinese culture-focused cross-cultural technical communication and Chinese technical communication will develop quickly. Research samples will then become more available for empirical study, and cooperative study of English-speaking and native Chinese researchers will also be possible. Then, more research questions will come on agenda.

The function of this study then goes beyond filling a void and meeting the needs of the reality by providing a good understanding of Chinese culture and some practical guidelines for the cross-cultural technical communicator. It will also contribute to the

development of this field by raising questions for further research and generating interest in this particular area of international technical communication.

WORKS CITED

- A Chinese-English Dictionary*. Beijing: Commercial Press, 1981.
- Abramson, Neil R. and Janet X. Ai. "Taking the Slow Boat to China?" *Business Quarterly* Winter 1994: 29-37.
- Anderson, Paul V. *Technical Writing: A Reader-Centered Approach*. San Diego: Harcourt Brace Jovanovich, 1991.
- Barclay, Rebecca O. et al. "Technical Communication in the International Workplace: Some Implications for Curriculum Development." *Technical Communication* 38 (1991): 324-334.
- Barton, Ben and Marthalee Barton. "Simplicity in Visual Representation: A Semiotic Approach." *Iowa State Journal of Business and Technical Communication* 1.1 (1987): 9-26.
- Birch, Cyril. *Anthology of Chinese Literature*. New York: Grove Press, Inc., 1967.
- Boiarsky, Carolyn. "Strategies for Successful International Communication: Using Cultural Conventions to Inform Your Documents." *Crossing Frontiers: IPCC '92 Conference Record*. (September 29-October 3, 1992, Santa Fe, New Mexico), 553-559.
- Brockmann, John. *Writing Better Computer User Documentation*. New York: Wiley & Sons, 1990.
- Bucknall, Kevin B. *Cultural Guide to Doing Business in China*. London: Butterworth-Heinemann Ltd., 1994.
- Budd, Timothy. *An Introduction to Object-Oriented Programming*. New York: Addison-Wesley Publishing Company, 1991.
- Chan, Wing-Tsit. "The Story of Chinese Philosophy." *The Chinese Mind: Essentials of Chinese Philosophy and Culture*. Ed. by Charles A. Moore. Honolulu: East-West Center Press and University of Hawaii Press, 1967.
- Chao, Yuen-ren. *Language and Symbolic Systems*. Cambridge: Cambridge University Press, 1968.

- . *Aspects of Chinese Sociolinguistics*. Stanford, CA: Stanford University Press, 1976.
- Chen, Guying "Formation of Laotse's Philosophy," *Translation and Comments on Laotse*, Beijing: China Publishing Agency, 1988.
- Cheng, Chung-ying. "Aspects of Classical Chinese Logic." *International Philosophical Quarterly* 11 (1971):213-235.
- . "A Generative Unity: Chinese Language and Chinese Philosophy." *Journal of the Chinese Language Teachers Association* 8.1 (1973): 1-17.
- Chinese Dictionary of Idioms*. Nanjing: Jiangsu People's Publishing House, 1984.
- Chinese Education Office. *Chinese (Vol. III)*. Beijing: People's Education Publishing House, 1992.
- Chu, Chauncey C. "Is the Language Responsible for the lack of Science (or Certain Patterns of Thinking) in Chinese Civilization? --A Linguist's View." Paper presented at the Southeastern Conference on Linguistics (18th, Knoxville, Tennessee, April 7-8, 1978).
- Chu, Yu-kuang. "The Chinese Language." *An Introduction to Chinese Civilization*. Ed. By John Meskill. New York: Columbia University Press, 1973.
- Communications Concepts*. "When Your Materials Go Abroad, Simplify Your English." *Intercom* 40.3 (1994): 8.
- Confucius. *The Great Learning, the Doctrine of the Mean, the Analects*, Shanghai: Shanghai Ancient Classics, 1987.
- Corbett, Edward P.J. *Classical Rhetoric for the Modern Students*. New York: Oxford University Press, 1971.
- Dakich, Milan. "Examining Some Multi-Cultural Communication Problems." *Proceedings of the International Professional Communication Conference (IPCC 89): Communicating to the World*. (Garden City, NY, October 18-20, 1989.)
- DeFrancis, John. *The Chinese Language: Fact and Fantasy*. Honolulu: University of Hawaii Press, 1984.
- De Mente, Boye Lafayette. *Chinese Etiquette & Ethics in Business*. Lincolnwood, IL: NTC Business Books, 1989.
- DiCecco, Yvonne Marie. "Graphic Organizers as an Aid in Fostering Comprehension of Expository Text." Dissertation. 1992.

- Emery, Deidre. "Developing Effective Instructional Graphics." *Journal of Interactive Instruction Development* 6.2 (1993): 20-24.
- Engholm, Christopher. *When Business East Meets Business West: The Guide to Practice and Protocol in the Pacific Rim*. New York, NY: John Wiley & Sons, Inc., 1991.
- *Doing Business in Asia's Booming "China Triangle."* Englewood Cliffs, New Jersey: Prentice Hall, 1994.
- Fairbank, John King. *The United States and China*. 4th ed. Cambridge, MA: Harvard University Press, 1979.
- Fan, Wenlan. *An Outline of Chinese History*. Beijing: People's Publishing House, 1963.
- Felker, et. al. *Guidelines for Document Designers*. Washington, DC: American Institutes for Research, 1981.
- Fisher, Julie. "Australian and United States Technical Communicators: A Comparison of Survey Results." *Technical Communication* 41.2 (1994) 283-287.
- Forsdale, I. "The Selective Process." *Perspectives on Communication*. Reading, Mass.: Addison-Wesley, 1981.
- Fung, Yu-lan. *A History of Chinese Philosophy*. Princeton: Princeton University Press, 1973.
- Glenn, Edmund S. "Semantic Difficulties in International Communication." *The Use and Misuse of Language*. Ed. by S. I. Hayakawa. Greenwich, CT: Fawcett Publications, Inc., 1962.
- Griffin, Robert E. et al. "Using Symbols in International Business Presentations: How Well Are They Understood?" *Imagery and Visual Literacy: Selected Readings from the Annual Conference of the International Visual Literacy Association* (26th, Tempe, Arizona, Oct 12-16, 1994).
- Halpern, Jeanne W. "Business Communication in China: A Second Perspective." *The Journal of Business Communication* 20 (1983): 43-54.
- Haneda, Saburo and Hirosuke Shima. "Japanese Communication Behavior as Reflected in Letter Writing." *The Journal of Business Communication* 19 (1982): 19-32.
- Hansen, Chad. *A Taoist Theory of Chinese Thought: A Philosophical Interpretation*. New York & Oxford: Oxford University Press, 1992.
- Hardyck, C., O. J. L. Tzeng, and W. S-Y. Wang. "Cerebral Lateralization Effects in Visual Half-Field Experiments." *Nature* 269 (1977):705-707.

- , "Cerebral Lateralization of Function and Bilingual Decision Processes: Is Thinking Lateralized?" *Brain and Language* 5 (1978): 56-71.
- Hartley, James. *Designing Instructional Text*. London: Kogan Page; NY: Nicholes, 1985.
- Haas, Christina and Jeffrey L. Funk. "Shared Information: Some Observations of Communication in Japanese Technical Settings." *Technical Communication* 36.4 (1989): 362-367.
- Hatta, Tj. "Asynchrony of Lateral Onset as a Factor in Difference in Visual Field." *Perception and Motor Skill* 42 (1976): 163-166.
- , "Recognition of Japanese Kanji in the Left and Right Visual Field." *Neuropsychologia* 15 (1977): 685-688.
- Hirata, K. and R. Osaka. "Tachistoscopic Recognition of Japanese Letter Materials in Left and Right Visual Fields." *Psychologia* 10 (1967): 7-18.
- Hoft, Nancy L. "International Technical Communication PIC Helping to Bridge Language and Culture." *Intercom* 42.2 (1995): 13, 15.
- Holyoak, K. James. *Mental Leap: Analogy in Creative Thought*. Cambridge, Mass.; London: MIT Press, 1995.
- Hoosain, Rumjahn. "Language, Orthography and Cognitive Processes: Chinese Perspectives for the Sapir-Whorf Hypodissertation." *International Journal of Behavioral Development* 9.4 (1986): 507-25.
- Horton, William. "The Almost Universal Language: Graphics for International Documents." *Technical Communication* 40.4 (1993): 682-693.
- Hou, Wailou. *A History of Chinese Thought*. Beijing: People's Publishing House, 1982.
- Howell, William S. "The Theoretical Directions for Intercultural Communication." *Handbook of Intercultural Communication*. Ed. by Molefi K. Asante, Eileen Newmark, and Cecil Blake. Beverly Hills, CA: Sage Publication, Inc., 1979, pp. 23-41.
- Huang, Bin-hong. *Huang Bin-hong Paintings*. Shanghai: Shanghai Calligraphy and Paintings Publishing House, 1994.
- Huang, Qiu-yuan. "Analects of Huang Qiu-yuan." *A Book on the Art of Painting from Rongbao Study*. Beijing: Rongbao Study, 1991.
- Huang Ti Nei Ching Su Wen, or The Yellow Emperor's Classic of Internal Medicine*. trans. by Ilza Veith. Baltimore: The Williams & Wilkins Company, 1949.

- International Ground Source Heat Pump Association. *Galt House Hotel & Waterfront Office Building*. (A brochure.) Stillwater, OK: Oklahoma State University Printing, 1995.
- Jansen, Carel. "Research in Technical Communication in the Netherlands." *Technical Communication* 41.2 (1994): 234-239.
- Jian, Bozan. *Chinese History*. Beijing: People's Publishing House, 1983.
- Jones, Scott et al. *Developing International User Information*. U.S.: Digital Press, 1992.
- Kaplan, Robert B. "Cultural Thought Patterns in Intercultural Education." *Language Learning* 16 (1966): 1-20.
- Kapp, Reginald O. *The Presentation of Technical Information*. New York: MacMillan, 1957.
- Kenna, Peggy and Sondra Lacy. *Business China: A Practical Guide to Understanding Chinese Business Culture*. Lincolnwood, Illinois: Passport Books, 1994.
- Killingsworth, Jimmie M. and Michael K. Gilbertson. "How Can Text and Graphics Be Integrated Effectively?" *Solving Problems in Technical Writing*. Ed. by Lynn Beene and Peter White. New York & Oxford: Oxford University Press, 1988.
- Kilpatrick, Retha H. "International Business Communication Practices." *The Journal of Business Communication* 21 (1984): 33-44.
- Klein, Fred. "International Technical Communication." *Technical Communication* 36 (1989): 159-161.
- Kohl, John R. et al. "The Impact of Language and Culture on Technical Communication in Japan." *Technical Communication* 40 (1993): 62-73.
- Landgren, Theodora. "Going Global: Preparing for an International Market." *Intercom* 41.2 (1994): 3-4.
- Lannon, John M. *Technical Writing*. New York, NY: HarperCollins College Publishers, 1994.
- Lathan, M. Gerald. "Internationalizing Business Communication." *Mid-South Business Journal* 2 (1982): 16-18.
- Latourette, Kenneth Scott. *The Chinese: Their History and Culture*. New York: The Macmillan Company, 1946.
- Lawrence, Susan V. et al. (a). "With Friends like These." *U.S. News & World Reports*. July 17, 1995. p32-34.

- Lawrence, Susan V. et al. (b). "A Dangerous Face off." *U.S. News and World Reports*. July 24, 1995. p28-29.
- Lefferts, Robert. *How to Prepare Charts and Graphs for Effective Reports*. Providence, RI: Jamestown Publishers, 1981.
- Legge, James (a) (Trans.). *The Chinese Classics* (Vol. I), Hong Kong: Hong Kong University Press, 1960.
- (b) (Trans.). *The Chinese Classics* (Vol. II), Hong Kong: Hong Kong University Press, 1960.
- Lei, Feng. *Lei Feng's Diaries*. Beijing: People's Publishing House, 1982.
- Li, Yanong. *Papers on Ancient Chinese History*. Shanghai: Shanghai People's Publishing House, 1979.
- Li, Zehou. *Papers on the History of Ancient Chinese Thought*. Shanghai: Shanghai People's Publishing House, 1986.
- Limaye, Mohan R. and David A. Victor. "Cross-Cultural Communication Research: State of the Art and Hypotheses for the 1990s." *The Journal of Business Communication* 28 (1991): 277-99.
- Lin, Yutang. *My Country and My People*. New York: Reynal & Hitchcock, 1937.
- (Trans. and ed.) *The Wisdom of Laotse*. New York: Random House, Inc., 1948.
- Littlejohn, Stephen W. *Theories of Human Communication*. Belmont, CA: Wadsworth Publishing Company, 1992.
- Liu, Da-jun. *A Treatise on The Book of Changes*. Jinan, Shandong: Qilu Publishing House, 1988.
- Long, Derek and Roberto Garigliano. *Reasoning by Analogy and Causality: A Model and Application*. London: Ellis Horwood, 1994.
- Ma, Ringo. "Taoist Thinking Pattern as Reflected in Communication." Paper presented at the Annual Meeting of the Western States Communication Association (64th, Albuquerque, NM, Feb. 12-16, 1993).
- Mackin, John. "Surmounting the Barrier between Japanese and English Technical Documents." *Technical Communication* 36.4 (1989): 346-351.
- Markel, Michael H. *Technical Writing: Situations and Strategies*. New York: St. Martin's Press, 1988.

- Matsui, Kyoko. Document Design from a Japanese Perspective: Improving the Relationships between Clients and Writers." *Technical Communication* 36.4 (1989): 341-345.
- McKim, Robert. *Experiences in Visual Thinking*. Monterey, CA: Books/Cole Publishing Company, 1980.
- McNaughton, William. (ed.) *Chinese Literature: An Anthology from the Earliest Times to the Present Day*. Rutland, Vermont & Tokyo, Japan, 1974.
- Mencius. *Mencius*. translated by D. C. Lau. Harmondsworth, England: Penguin, 1970.
- Merrill, Carla Kary and Marjorie Shanoski. "Internationalizing Online Information." *SIGDOC '92 Conference Proceedings*. (October 13-16, 1992, Ottawa, Canada), 19-25.
- Perelman, Chaim. *The Realm of Rhetoric*. Notre Dame, Indiana: University of Notre Dame Press, 1982.
- Perica, Louis. "Honesty in Technical Communication." *Technical Communication* 15 (1972): 2-6.
- Petty, Richard E. and John T. Cacioppo. *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*. New York: Springer-Verlag, 1986.
- Pye, Lucian W. *Chinese Commercial Negotiating Style*. Cambridge, Massachusetts: Oelgeschlager, Gunn & Hain, Publishers, Inc., 1982.
- *Chinese Negotiating Style*. Westport, Connecticut: Quorum Books, 1992.
- Rains, Nancy E. "Prepare Your Documents for Better Translation." *Intercom* 41.5 (1994): 12.
- Research & Production Center of Medical Appliances, Shanghai Jiantong University. *JDYD-I Argon High-Frequency Electric Knife*. (A brochure.)
- Rubens, Philip. *Designing Online Information*. 1988.
- Samovar, Larry A. and Richard E. Porter. *Communication between Cultures*. Belmont, CA: Wadsworth Publishing Company, 1991.
- Saral, Trlsi B. "The Consciousness Theory of Intercultural Communication." *Handbook of Intercultural Communication*. Ed. by Molefi K. Asante, Eileen Newmark, and Cecil Blake. Beverly Hills, CA: Sage Publication, Inc., 1979. pp. 77-84.
- Schildt, Herbert. *C++ from the Ground Up*. Berkeley, California: Osborne McGraw-Hill, 1994.

- Seligman, Scott D. *Dealing with the Chinese: A Practical Guide to Business Etiquette in the People's Republic Today*. New York, NY: Warner Books, Inc., 1989.
- Stevenson, Dwight W. "Audiences Analysis across Cultures." *Journal of Technical Writing and Communication* 13.4 (1983): 319-330.
- Sung Ying-Hsing. *T'ien-Kung K'ai-Wu or The Creations of Nature and Man*. Trans. by E-Tu Zen Sun and Shiou-Chuan Sun. University Park and London: The Pennsylvania State University Press, 1966.
- Sperry, R. W., M. S. Gazzaniga, and J. E. Bogen. "Interhemispheric Relationships: The Neocortical Commissures; Syndromes of Hemispheric Disconnection." In P. J. Vinken and G. W. Bruya, eds. *Handbook of Clinical Neurology*, Vol. 4. Amsterdam: North-Holland Publisher, 1969.
- Sprung, Robert C. "Two Faces of America: Polyglot and Tongue-Tied." *Designing User Interfaces for International Use*. Ed. by Jakob Nielsen. New York: Elsevier, 1990.
- Thrush, Emily A. "Bridging the Gaps: Technical Communication in an International and Multicultural Society." *Technical Communication Quarterly* 2.3 (1993): 271-83.
- Tzeng, Ovid J. L., Daisy L. Hung, and Linda Garro. "Reading the Chinese Characters: An Information Processing View." *Journal of Chinese Linguistics* 6 (1978): 287-305).
- Tzeng, Ovid J. L., D. L. Hung, and W. S-Y. Wang. "Speech Recoding in Reading Chinese Characters." *Journal of Experimental Psychology: Human Learning and Memory* 3 (1977): 621-630.
- Uritam, R. A. "Physics and the View of Nature in Traditional China." *American Journal of Physics* 43.2 (1975): 136-152.
- Waley, Arthur (a) (Trans.) *The Analects of Confucius*. London: George Allen & Unwin Ltd., 1939.
- (b). *Three Ways of Thought in Ancient China*. London: George Allen & Unwin Ltd., 1939.
- Wang, Li. *The Ancient Chinese Language*. Beijing: China Publishing House, 1980.
- Wang, Lian-yun. (ed.) *Lower-Level High School Chinese Textbook*, Vol. 3., Beijing: People's Education Publishing House, 1993.
- Warren, Thomas L. *Technical Writing: Purpose, Process, and Form*. Belmont, California: Wadsworth publishing Company, 1985.

- . Interview with the author, 1996.
- Watson, Burton. (Trans.) *The Complete Works of Chuang Tzu*. New York: Columbia University Press, 1968.
- Weiss, Edmond. *How to Write Usable User Documentation*. Phoenix, AZ: Oryx Press, 1991.
- . “‘Ourselves among Others’: A New Metaphor for Business and Technical Writing.” *Technical Communication Quarterly* 1 (1992): 23-36.
- Weymouth, C. C. “Establishing Quality Standards and Trade Regulations for Technical Writing in World Trade.” *Technical Communication* 37.2 (1990): 143-147.
- Wik, P. *How to Do Business with the People’s Republic of China*. Reston, Virginia: Reston Publishing Company, 1984.
- Wilhelm, Hellmut. *Change: Eight Lectures on the I Ching*. Trans. from the German by Cary F. Baynes. Princeton, NJ: Princeton University Press, 1973.
- Winters, Elaine. “Thoughts on Achieving International Technical Communication Success.” *Intercom* 40.3 (1994): 7.
- Yosida, Mitukuni. “The Chinese Concept of Nature.” *Chinese Science*. Ed. by Shigeru Nakayama and Nathan Sivin. Cambridge, Massachusetts: The MIT Press, 1973. pp. 71-89.
- Yum, June Ock. “The Impact of Confucianism on Interpersonal Relationships and Communication Patterns in East Asia.” *Intercultural Communication: A Reader*. Ed. by Larry A. Samovar and Richard E. Porter, Belmont, CA: Wadsworth Publishing Co., 1991, pp. 66-78.
- Zhang, Dai-nian. *A History of Chinese Philosophy*. Beijing: Commercial Publishing House, 1987.
- Zhong, Bai-hua. *An Aesthetic Promenade*. Beijing: Beijing University Press, 1982.
- Zong, Baolin and H. W. Hildebrandt. “Business Communication in the People’s Republic of China.” *The Journal of Business Communication* 20.1 (1983): 25-32.

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VITA

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