

Designing Multilingual Communications

Sauman Chu
Barbara Martinson
Mary McNaughton
Debra Lawton



Photo
Not
Available

Photo
Not
Available

Abstract

Focus groups of recent Hmong and Somali immigrants provided information about effective design variables for public service brochures. Each immigrant group participated in two sessions. The first session queried subjects on preferences for layout and bilingual text, and appropriate fonts and images. During the second session participants reacted to several variations of a brochure that was designed using findings from the first session. Both Hmong and Somali participants preferred a bilingual layout including both their language and English. Font legibility was important; good contrast between letterforms and background was essential. Images used should respect cultural expectations. The Hmong participants did not respond favorably to images showing native dress, while images of Somali immigrants must respect cultural aspects of dress.

Sauman Chu is an assistant professor and Barbara Martinson is an associate professor in the Department of Design, Housing, and Apparel at the University of Minnesota. Mary McNaughton is a Ph.D. candidate at the University of Minnesota and Debra Lawton is a graduate student at the University of Wisconsin-Madison.

Designing Multilingual Communications was funded by the President's Multicultural Research Award at the University of Minnesota.

The primary focus of this study is on the visual communication of public service information from community service organizations to an audience of culturally diverse readers. Many of these readers have limited or no English proficiency. There is an increased need for communications that include at least one other language in addition to English. Minnesota has the highest rate of refugee and new immigrant resettlement, as reported by the U.S. Office of Refugee Resettlement in 1996. New immigrant groups have an immediate need for information about health services, housing, nutrition, and education. Increased accessibility to this information will help in the resettlement process. Contemporary attitudes toward multiculturalism demand that professional communicators provide information in several languages.

Most visual communicators in the U.S. have little experience with designing for ethnic groups different from their own. There is a need for more research and information on how to design for specific immigrant groups. The purpose of this project is to develop both a set of design guidelines and a recommended procedure that designers can use to design effective materials. Using both Hmong and Somali focus groups, we examined preferred and culturally appropriate design elements, and attempted to establish an effective process that other designers could use when working on multilingual projects.

Hmong Language and Communication Systems

There are approximately 150,000 to 200,000 Hmong in the United States who have settled primarily in Wisconsin, Minnesota, and California between 1975 and 1995. Several million remain in China, Thailand, and Laos and speak a variety of dialects. There was no written script until the mid 1900s because of a history of upheaval which caused their stories to be passed from generation to generation orally.

There are at least three typographies of this language. "Latin," which is the most widely used typography, was introduced by French Catholic missionaries in the early twentieth century. "Ntawv Paj Ntaub," which means letters of embroidery, uses characters that look like the designs found on traditional Hmong costumes. The women passed the stories of their heritage through such stitchery by sewing stylized symbolic characters into their dresses. "Ai Pao Lo" was created in the early 1990s and was derived from the Hmong's historical and religious heritage.

There are two main versions of Hmong oral language. The white dialect is the principal dialect, using words stressed within the throat. Green dialect requires a softer tone and more tongue rolling. There is some controversy as to the legitimacy of the other dialects, the Blue and the Striped. The difference in dialects equates to the difference between a Texas and a British accent of the English language. Subgroups of this culture are distinguished by the dialect they speak, the color of clothing they wear, and the variations on the rituals they perform.

Somali Language and Communication Systems

Somali immigrants are relatively new to the United States as their migration has taken place in the mid-to-late 1990s. Therefore, Americans know little about their religious customs and lifestyles. The Somali Center in Minneapolis, Minnesota, has found that once settled in the United States, the Somalis remain true to clan designations. A leader is appointed to serve as a liaison for its members to the outside world. The majority of this population is Muslim and bring with them strong religious practices and laws. For example, devout Muslims must take time to pray five times a day.

Until the 1969-70 revolution led by General Muhammad Siad Barre, the colonized country of Somalia had become divided through a socio-economic stratum based on mastery of the English and Italian languages. Under the rule of Siad Barre, in 1972, an official Somali script was created. Its use was enforced nationally and used within the government. The script removed the language barrier and provided the means to promote a massive literacy campaign. By the mid-1970s, the government had claimed 60% literacy. Modern public education was offered free at all levels.

Somali nationals speak one of several dialects. Of these, the most widely used is Common Somali. Coastal Somali and Central Somali are the others. "Facility with language is highly valued in Somali society; the capability of a suitor, a warrior, or a political or religious leader is judged in part by his verbal adroitness. In such a society, oral poetry becomes an art, and one's ability to compose verse in one or more of its several forms enhances one's status. Speakers in political or religious assemblies and litigants in courts traditionally were expected to use poetry or poetic proverbs. Even everyday talk tended to

have a terse, vivid, poetic style, characterized by carefully chosen words, condensed meaning, and alliteration” (*Somali in Minnesota*, 1998 [on-line]).

Importance of the Study

The need for print communication for Hmong and Somali refugee populations has been cited by a number of service organizations (Berg, personal communication, October 5, 1997; Hirte, personal communication, October 18, 1997; Suga, personal communication, October 22, 1997). Designers familiar with the framework of their culture, language, and communication systems can use more informed means to reach these people. Providing them with written materials effective in conveying information about education, social services, medical care, job information, and housing will make their transition into American society easier. In addition, increased knowledge about communication will positively impact social service organizations and graphic design professionals through the publication of procedural and design guidelines for multilingual publications.

Goals

One goal of this study is to increase graphic designers’ awareness of procedural and design variables necessary to develop effective bilingual/multilingual printed information and to work with community service professionals in the development of design prototypes. The ultimate goal is to improve and enhance the visual communication of multilingual printed information in order to facilitate comprehension by culturally diverse immigrant groups.

Objectives and Research Questions

The objectives of this study are divided into two categories: procedural considerations and design variables.

A. Objective and Research Questions of Procedural Variables

Procedural variables address the question: “What steps are necessary in the development of visual messages for diverse cultural groups?”

- collaboration with community organizations in the development of effective collaborative procedures and design strategies;

- identification of effective processes for the development of material that includes one or more languages.

The research questions are:

1. Decision-making processes in the development of single-language presentations (separate publications for each language) or multilingual publications (one publication including two or more languages).
 - a. Are single-language publications more effective for certain target audiences?
 - b. When are bi- or multilingual publications preferable?
2. Determining effective processes for the development of material that includes one or more languages.
 - a. What are the research steps and available literature related to the culture and its system of communication?
 - b. How does the design process change when developing multilingual communication?
 - c. How should design prototypes be evaluated?
3. Identification of appropriate sources for translation and consultation.
 - a. What variables need to be considered when selecting a translator?
4. Determining the necessary stages in the development of multilingual information.
 - a. Can a distinct methodology be established?
 - b. How can related research be applied to different cultural groups?

B. Objectives and Research Questions of Design Variables

Design variables focus on including layout and images used to construct the messages.

- identification of design variables and elements that influence the understanding of multilingual printed pieces;
- identification of differences in visual perception and comprehension among diverse cultural groups;

- description of various graphic organizational frameworks that might support and promote effective communication in bilingual printed pieces.

The research questions are:

1. Text-related variables
 - a. What typographic variables should be considered?
 - b. Is there a hierarchical difference between the languages based on placement on page?
2. Image-related variables
 - a. How and when should images be used?
 - b. Are specific image styles (i.e., drawings, photos) more effective for certain cultural groups?
3. Layout (design format) variables
 - a. When should the layout include multiple languages?
 - b. How does the layout affect the perception and decoding of the message?

Procedures and Methods

Focus group was determined to be the most effective method of gathering the data necessary for this project. The direct interaction with subjects allowed for communication that “connected the research team with the participants” (Morgan & Krueger, v.1, 1998, p.9). The value of focus group in this situation is that discussion with recent immigrants provides “insider” information (Morgan & Krueger, v.5, 1998). Also, one goal of the project is to identify an effective process for multicultural communication. Focus groups, because of their interactivity, allow for a discussion of effective process (Morgan & Krueger, v.5, 1998).

Subjects in this study were Hmong and Somali immigrants in Minnesota who have limited knowledge of English. The Hmong focus group was recruited through the Centre for Asians and Pacific Islanders in Minnesota and the Somali focus group were participants in an indoor air quality study group from the Minnesota Extension Service. Both focus groups were scheduled to meet twice. An interpreter was hired for each group to facilitate the communication process between the investigators and the subjects. The designing of multilingual

brochures was the subject matter for discussion.

At the first session, emphasis was placed on discussing and identifying design variables and strategies for producing an effective brochure. Following this section, four different prototypes for the identified brochure were generated based on the discussion. In the second session, the four prototypes were presented to the focus group. A preferred prototype was selected. Further discussion on revising the solution was also included.

Stage I: Study with Hmong Focus Group

Focus Group: First Session

Subjects and procedure

Nine Hmong immigrants participated in the first session. This group was composed of four men and five women ranging in age from 19 to 60. Subjects had been in the U.S. fewer than five years. A moderator, who spoke both English and Hmong and has a great deal of experience leading focus group discussions was hired to lead the session. A note-taker, who was also fluent in English and Hmong, was hired to translate and recruit subjects for the study. The researchers met with the moderator and note-taker to discuss the project and questions prior to the focus group meeting. Researchers attended and audio recorded the focus group session.

The purpose of this session was to identify design variables that effectively communicate to the Hmong population. The session began with a brief introduction to the topic of print communication, and we asked the group members if they have seen and/or used brochures to attain information about health care or related issues. We also inquired as to whether they preferred multilingual or single-language print materials. Following these introductory questions, we proceeded to ask about the layout of information, preferred fonts, preferred color and color meaning within Hmong culture, and the use of drawn or photographed imagery. We finished with an open-ended question about how the subjects would design a brochure to best communicate to their peers.

Results - focus group: first session

Use of brochures. In response to this general question about brochures, participants liked bright colors, colorful pictures, and bold type. Most of the subjects

were critical of the fact that many brochures in Hmong languages had misspelled words and incomplete information.

Multilingual presentation. Subjects preferred brochures printed in both English and Hmong. Subjects shared their ideas about the advantages of a multilingual publication. They felt that the content was important when printed in several languages. Also, bilingual individuals can switch back and forth between languages in order to clarify what they can not understand in one or the other. Multilingual brochures take less space for display purposes. One essential comment made by a younger subject was, "I like multilingual brochures because I can't read Hmong. Sometimes, when people see that you have a Hmong name, they automatically send you Hmong brochures and it's of no use to me. I read everything in English."

Layout of information. Participants seemed to prefer a list rather than paragraph format because, as one of the subjects indicated, the list style separated important main points. Although there was not much discussion about the length of the printed information, subjects did prefer to read something short and concise rather than a lengthy paragraph.

Font preference. The group was shown the same text in four different fonts in black on a white ground. In regard to styles of fonts, subjects preferred darker, clearer and more structured typeface such as "Helvetica" and "Times" over cursive writing. They emphasized that the font must have high contrast with the background so that it's easier to read.

Color preference. We began with a general discussion of color symbolism in Hmong culture. Subjects indicated that red was the only color that was perceived negatively. When shown text in six different colors (black, red, blue, green, purple, and yellow), blue, green, and black were the preferred colors due to their high contrast with the white background.

Imagery. Subjects were shown two examples of imagery. In each example there was both a line drawing and a photograph. One set showed how to position a band-

aid on a knee and the other showed how to use soap to wash your hands. Subjects seemed to agree that the choice to use drawn versus photographed images was dependent upon circumstances. Two of the older women liked photographs because they were in color. In general, the reaction was to prefer photographs over the line drawings. We then shifted the discussion to the proper representation of people. Most agreed that a brochure with a photo looked professionally done. Some participants agreed that photographs were better and that the subject should be Asian. They felt that if a Caucasian person was used on the brochure, it had nothing to do with them. In addition, two subjects commented that if the brochure was for Hmong people, the picture should have a person with Hmong clothes and Hmong head-dress. However, someone in the group disagreed with this comment as being too stereotyped.

How subjects would design a brochure. Most subjects agreed that budget and the target audience were critical components in determining these factors. In summary, elements that they preferred were bilingual presentation (Hmong and English), bright colors, and photographs.

Focus Group: Second Session

Subjects and procedure.

The researchers used results from the first focus group to develop and design sample brochures. The Minnesota Department of Health provided information for the sample brochure, which was about health assessment. The brochure was the topic of discussion for the second group meeting. Information in the brochure was available in both English and Hmong.

We began with two variations of the brochure. Both versions had both languages on the front panel. The first positioned English on one side and Hmong on the other. The second positioned English at the top and Hmong at the bottom of each page. This layout was based on the discussion from the first focus group session. We also asked questions about the length of information, the font used, the graphic treatment of the headings, and the imagery used. We concluded with an open discussion of what an effective process of designing bilingual brochures for Hmong people would be.

Results – focus group: second session

Positioning of bilingual information. Two variations of the same brochure were shown. One version placed English on one side and Hmong on the other. The other version placed English at the top of the page and Hmong underneath it. Subjects preferred the brochure with English on one side and Hmong on the other. They felt that the one with English placed at the top and Hmong underneath it was confusing. They preferred reading all of the information in one language, rather than switching back and forth. In other words, someone who can read English would prefer to read the entire text in English, and someone who prefers reading Hmong would just read the Hmong text.

Formatting of texts into lists. All of the subjects felt that the list format was very clear.

Length of information. Subjects preferred short and concise content. However, there was concern about the adequacy of the information presented in the brochure. One subject indicated that the content was not sufficient enough for conveying the message.

Font. In regard to the font styles, subjects liked the clarity of the headings and the text set in a bold, sans-serif font.

Graphic treatment of headings. Two brochures were shown to the group. The first used centered headings of black type on a white background. The second reversed white type out of black bar for the heading. Subjects preferred the second design in which the headings were white and placed on a black rectangular bar.

Color. Two sample brochures containing the same design elements and information were then presented. One was in black and white, and the other was in black and green. Green was used for graphic bars and headings. All subjects preferred the black and green version.

Imagery. The brochure featured an image of an Asian man on the cover. Subjects were asked about the appropriateness of this image. They tended to think

that simply showing an Asian person or a face on the cover did not truly represent the content. They preferred a more particular image (for example, a Hmong person) that was doing something related to the content of the brochure.

The design process of producing multilingual print materials. Subjects felt that the Hmong community relies more and more on brochures and other publication materials as a means of communication. There were a few suggestions by subjects about how to test the effectiveness of the brochure within the Hmong community before it is actually printed: (a) distribute the brochure to different Hmong organizations for comments and feedback, (b) draw a random sample of people for focus group discussions, and (c) find a group of people that is particularly interested in the topic of the brochure. Subjects also felt that focus groups were a good idea but thought that they should be specific to the topic at hand.

Concluding open discussion

Subjects prefer multilingual/bilingual publications as opposed to a separate publication in each language. This conclusion was made based upon the factor of comprehension rather than budget constraints. Participants were concerned about variables such as photos, number of colors, and paper quality. In addition, younger generations may prefer to read the entire text in one language (on one side of the publication). For older people, seeing both languages was not as bothersome as it was for young people.

One participant commented that the publication should have pictures since some people cannot read. In other words, including pictures would increase the recognition of the publication's subject matter. If someone didn't understand the text, he/she might find somebody to interpret it if the pictures were of interest to him/her. Information should be short and concise since nobody would read it if it were too verbose. The ideas need to be simple if the concept is to be represented by pictures. Important messages should be written or designed differently from the rest of the text. A clean, dark, and standard typeface is preferred since these characteristics are more recognizable and frequently used. In terms of color variables, red is the only color for which subjects have negative associa-

tions. If someone uses a red piece of paper or red writing, this is interpreted either as letters or words to kill people, or as a person showing disrespect for someone else.

In regards to image-related variables, subjects tended to agree that if the content is sensitive (e.g., breast cancer), a drawn picture would be more appropriate. Drawn pictures are also a better choice for children because drawings can help them to understand the subject matter. However, most participants think that photographs are a better option since they look more professional. Stereotyping, particularly in the use of native clothing, seems to be a problem for some participants because they don't like being portrayed as minorities. They said that people don't wear traditional Hmong clothes and head dress anymore and therefore, designers shouldn't use this kind of image to represent Hmong culture. On the other hand, some participants said that such images don't have negative connotations. As one person commented, "I don't think that it depicts Hmong people in a negative way. It just looks like the brochure is talking about a particular group of people. If you draw an Asian person, he/she could be Chinese or any other Asian nationality. But if you draw a person with Hmong clothes with a Hmong head-dress, then you know immediately that it's a Hmong person. It's a symbol of our people."

Discussion and Conclusions for Stage I

All of the above-mentioned factors need to be considered in order to map out effective processes for the development of material that includes one or more languages. First, the designers must learn about communication within a particular culture. Secondly, the design process will involve members of the targeted cultural groups before actual production of a piece takes place. Third, there must be a process for evaluating prototypes; who will evaluate them, what will be evaluated and how? Suggestions from this particular study included the following: (a) test prototypes with Hmong agencies, (b) randomly select people from different generations for feedback, and (c) utilize tracking systems at various organizations where the brochure is distributed. In regard to recruiting subjects into a focus group or testing the effectiveness of a brochure, participants in the study suggested that specific groups should be formed only if they have interest in the particular content of a brochure. Additionally, age and gender are important factors for focus groups. This is especially true in Asian culture, since

males are more dominant than females in group discussions. Additionally, if a translator is needed, it is essential that the person not only be able to speak both languages (e.g., Hmong and English in this study), but that he/she understand the cultural variables that are being tested.

Many subjects were concerned about the writing and spelling of the text. Accuracy of information reflects the importance of a publication, as well as the perceived respectfulness of another culture. Most subjects were critical about many publications produced in Hmong that contain incomplete information or misspelled words. Proofreading the material is strongly recommended.

Because participation in the study was voluntary and meetings between the first and second stages were far apart, we lost six subjects for the second discussion session. In spite of this, it was predicted by the subjects that having another focus group would probably yield similar results.

Stage II: Study with Somali Focus Group

During the second stage of the study, the process used in stage one was repeated with focus groups consisting of recent immigrants from Somalia. Increasing numbers of Somali immigrants have come to live in Minnesota in the past two years. In contrast to the Hmong who resettled nearly 20 years ago and have developed strong cultural organizations and representation in professional and political life, the Somali are new to Minnesota and are only in the beginning stages of developing community service organizations.

Focus Group: First Session

Subjects and procedure

Subjects for the focus group are participants in an indoor air quality study group. They meet monthly with an interpreter and an Extension educator from the Minnesota Extension Service to discuss air quality issues. This group was selected as a focus group with the hope that there would be less attrition in an already formed group that met regularly than we experienced with the Hmong focus group. The interpreter is known within the local Somali community and works at a community center helping others adjust to life in Minnesota.

Eight subjects participated in the first session. They were all women and ranged in age from 25 to 65. A mixed gender

group would not be appropriate in this culture. The same procedure was used as described in stage I for the Hmong focus group.

Results – focus group: first session

Responses to the various questions will be summarized below. Unlike the Hmong group, the Somali subjects tended to discuss the issues less, and come to a consensus fairly quickly.

Use of brochures. Most of the subjects had seen brochures and few had used brochures to attain information about health issues, housing, education, or other issues. Most of the women did not read English, and several did not know how to read. They said that they would not pick up a brochure if it was not written in Somali or did not have an image of a Somali person on it.

Multilingual presentation. Like the Hmong focus group, the Somali subjects also preferred brochures printed in both English and Somali. They said that this bilingual approach would help them learn the language and that for those who speak both languages they could read both and achieve greater understanding of the content. They also mentioned that in many households the younger members would be able to read English, but the older family members would only read Somali.

Layout of information. Subjects agreed that a short amount of information was most desirable. A bulleted list format was preferred. Information should be clear and succinct. They said that they would not bother to read brochures with long sections of writing.

Font preference. The group was shown the same text in four different fonts in black on a white ground. Subjects preferred a san-serif font called Myriad. They preferred this font because it was bold and clear against the background. They did not like the plainness of Helvetica, nor the serified fonts such as Garamond and Garamond italic. They did not like fonts that might stereotypically represent an African culture such as Lithos. They emphasized that the font must be bold, very clear and easy to read, and must have good contrast with the background.

Color preference. We began this series of questions with a general discussion of color symbolism in Somali culture. There seems to be less color symbolism than in other cultures. White was the only color mentioned as being symbolic for its use in funerals. When shown text in six different colors (black, red, blue, green, purple, and yellow) they preferred text that contrasted most greatly with the background and selected either the black, blue, or green. They did not like the red or purple, and said that the yellow was ineffective due to the lack of contrast with the background.

How subjects would design a brochure. All of the subjects agreed that bold and clear presentation of information was more important than elaborate design or decoration. They wanted things simply and clearly presented. Paper, color, and other design elements were not important--just brief and very readable information.

Focus Group: Second Session

Subjects and procedure

The same group of eight subjects attended the second session and the interpreter remained the same. At this second session we asked subjects to view four brochures that we had designed according to the subjects' preferences from the first focus group session. The subject matter of the brochure was housing maintenance and it had a picture of a Somali woman in appropriate dress on the front. We began the discussion by showing two variations of the brochure. The first positioned English text on one side and Somali text on the other. The second positioned English at the top and Somali at the bottom of each page. We then asked questions as described in the first stage for the Hmong discussion.

Results – focus group: second session

Positioning of bilingual information. Two brochures were shown. One placed English text on one side and Somali on the other. The second brochure placed English text at the top of each column of the brochure and Somali text underneath. Subjects preferred the placement with one language on each side of the brochure. They said that this provided for more smooth continuation of information, was less choppy and it

was easy to follow the information from section to section. Subjects also felt that this would help them in learning the English language. They did say that they would more likely pick up the brochure if the title printed in Somali was positioned above the English title as they would immediately see that it was directed at Somali readers.

Formatting of text into lists. Subjects preferred information in numbered lists over bulleted lists. They said that each item should make a short and succinct point.

Length of information. Information should be very short and easy to understand. Perhaps if the information were especially relevant to them they would take the time to read it; however, short information was preferred.

Font. The san-serif font used (Myriad) was appropriate for the Somali language. They appreciated its boldness and legibility.

Graphic treatment of headings. Two brochures were shown to the group. The first used centered headings on black type on a white ground. The second reversed white type out a black bar for the heading. They preferred the second treatment. They said that the white type was easier to read on the black background; and it was more emphatic and signaled that it was a heading.

Color. Subjects were shown identical brochures, one printed in black on white paper and a second printed in green on white paper. Subjects said that either color was appropriate and easy to read.

Imagery. The brochure featured an image of a Somali woman seated in front of the window. Her garments covered all of her body except for her face. The subjects felt the photo was very appropriate and that it represented a Somali woman appropriately.

Other design variables. Again the group members stressed the importance of having an appropriate picture of a Somali person on the cover. This will signal to them that the brochure is intended for Somali readers.

The design process of producing multilingual print materials. The subjects felt that focus groups were a good idea for reviewing both the text and the layout of brochures for the Somali population. A focus group allows for the discussion of possible changes or revisions. As Somali language is more unified than the Hmong language, one focus group should be sufficient to review the material. This group of subjects was all women, however, and they did feel that men might respond differently.

Concluding open discussion

We concluded with a general discussion of design for the Somali population. The subjects said that the biggest challenge of print communication is that brochures are not common in Somalia and that many people have never seen them before. Communication in Somalia usually takes place verbally. Very few brochures have been designed in Somali, and so they will have to learn the benefits of print communication.

Discussion and Conclusion for Stage II

In general, the results were similar to the Hmong focus group in terms of preferences for both design variables and effective procedures. The Somali preferred the inclusion of both English and Somali languages, the use of a standard font, and the use of a list format. Accurate and appropriate translation of information is essential. The primary concern of Somali subjects was the scarcity of information available in their language.

Discussion and Conclusion

The Somali subjects represented the most recent immigrant group to Minnesota. It became obvious during our focus groups sessions that very little print communication is designed for the Somali population and that print communication is not typical of Somali culture. Many people, especially women, cannot read. The Hmong immigrants were also not used to print communication in their own country, but as the more established immigrant group they have become accustomed to the use of print communication in American culture. This difference in time of residence in America seemed to generate some distinct differences in responses between the two groups.

The Hmong subjects were used to seeing brochures and had seen many developed for the Hmong immigrant population. They desired a higher quality of brochure, one that looked like the typical American brochures printed in color on quality paper. Many of the bilingual brochures they have seen are developed cheaply and with low-quality graphic elements. In contrast, the Somali subjects were not used to seeing brochures and emphasized the need for anything printed for Somali readers. They were less interested in sophistication of design and requested fairly basic, easy to read and use design. Both groups preferred information that was brief and preferred a list format over a paragraph when possible.

Both groups preferred photographic imagery to drawn imagery, and they wanted pictures to accurately represent their culture in appropriate dress. Hmong people should be depicted in brochures targeted at Hmong audiences, and Somali in brochures targeted at Somali audiences. The Hmong did not particularly like the frequent representation of Hmong people in traditional dress as they do not dress that way on a daily basis. They did see the value of such imagery in signaling that the information was targeted to the Hmong population. The Somali subjects, in contrast, insisted on traditional dress and emphasized that other forms of dress would be inappropriate.

The Hmong group preferred the use of more color, while the Somali subjects placed an emphasis on high contrast between lettering and the background. The Hmong group would prefer four-color communication like typical American brochures, while the Somali subjects would prefer basic clear communication. Table 1 is a summary of the design preferences of the two focus groups from this study.

Based on the above information, designers involved in projects aimed at multicultural audiences should use a bilingual format. Information should be brief and accurate. Important points should be presented as a bulleted list. The typeface should be a standard font such as Helvetica or Times. Contrast between type and background is essential for type and readability. Images should accurately reflect the cultural group.

Focus groups seemed to be appropriate for gaining feedback about the design of brochures. Both groups emphasized the need for several people to review the brochure for accu-

Table 1 Summary for Design Preferences of Focus Groups	
Hmong	
Format	Hmong language printed on one side; English on other bulleted list;
Length	brief and concise
Font	bold font
Headings	white-on-black
Color	Green; would like full-color when possible
Type of Imagery	Photo
Image Content	Hmong person in western or traditional dress
Somali	
Format	Somali language printed on one side; English on other bulleted list;
Length	brief and concise
Font	bold, san-serif
Headings	white-on-black
Color	dark color, black or green; strong contrast with ground
Type of Imagery	Photo*
Image Content	Somali person in traditional dress
* Both the Hmong and Somali subjects would prefer a drawing when sensitive subjects were being discussed	

racy of translation and appropriate imagery. The Hmong said that focus groups from different cultural groups within the Southeast Asian community should be consulted, while the Somali group cited that the only differences within Somali culture would be based on gender.

Designers are usually trained in aesthetics and production methods; and only rarely does design education prepare designers for working with diverse cultural groups. Research on multilingual design is rare and focussed on reading education (Baker, 1995). Based on the findings from this study, we

suggest the following procedural steps of producing multilingual/bilingual design:

1. Develop text and have it translated.
2. Have translation reviewed by at least two different translators from varying sub-cultural backgrounds.
3. Develop draft of publication including pictures.
4. Have translators review images and text.
5. Prepare final comprehensive design.
6. Have focus group from cultural group review the design; include age, gender, and sub-culture variation in members.
7. Produce publication.

The goal of this project was to examine both the design variables and the procedural variables involved in design for diverse cultural groups. A very practical goal is to develop information that is useful for designers. This combination of the need for information from recent immigrants and the quest for concrete information about graphic elements called for use of the focus group method. This method was appropriate in that it allows participants to gain familiarity with the topic being discussed; and to express their opinions and listen to others. Extensive planning and structuring of the question sessions allowed the researchers to get at specific information. Questions were sequenced to allow for maximum insight (Morgan & Krueger, 1998). Questions and research materials were kept consistent and followed accepted protocol. The team of researchers was kept consistent for both cultural groups. Validity was enhanced through concluding discussion sessions where subjects were asked to verify the information as perceived by the researchers. Consistency in the analysis stage was maintained by the use of audio recordings and review by translators. An additional de-briefing session with the moderators helped to assure the accuracy of the researchers' understanding. The two-session approach also helped to enhance validity in that the findings from session I were tested in session II.

As with any research study there were limitations. Differing obstacles affected the results for each of the cultural groups. The loss of Hmong subjects between sessions I and II was

disappointing, and certainly limits the generalizability of the results. However, generalizability is not an objective of focus group research (Morgan & Krueger, 1998). This loss of subjects resulted in our use of an intact group for the Somali focus group. We felt that this cohesive group would guarantee consistent subject participation in each of the sessions. This did prove to be true. The use of the intact group has its own set of limitations in that they were all women. Also, subjects were not evaluated on individual reading ability in either English or their native language, and, while it must be recognized that reading ability would influence use of brochures, it was not our objective to work with the level of text difficulty. Future research could include an examination of the relationship between reading ability and the level of writing.

While validity, reliability, and generalizability are essential concepts of quantitative research, the practical goal of this qualitative study in examining applied visual communication is better achieved by the concept of transferability (Guba & Lincoln, 1989). The user of this research can transfer some of the findings from the study to another situation and modify them as appropriate. Through research and practice the process of communicating to diverse audiences should be improved. The Hmong and Somali populations in the United States provide unique opportunities to learn from diverse cultures and to begin to understand their experience in a new land.

References

- Baker, C. (Ed.). (1995). *Building bridges: Multilingual resources for children*. Avon, England: Multilingual Matters Ltd.
- Chan, S. (1994). *Hmong means free: Life in Laos and America*. Philadelphia: Temple University Press.
- Cross Cultural Health Care Program. (1996). Voices of the Somali community. <http://www.hslib.washington.edu/clinical/ethnomed/voices/somali.html>
- Guba, E. G. & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage Publications Ltd.
- Hodgson, R. & Sarkonak, R. (1987). Bilingualism and visible language. *Visible Language*, 31, 18-41.
- Morgan, D. & Krueger, R. (1998). *The focus group kit*. Thousand Oaks, CA: Sage Publications Ltd.
- Somali in Minnesota (1998). <http://www.cscmn.org/>