

Information Design
Capstone Course Addendum:
Localization
Bentley College
Waltham, MA

Global Documentation: Buzzwords, Horror Stories, or Design Principles

Preface

As an auxiliary part of my Information Design capstone project, it was suggested that I include a white paper discussing cultural differences to consider when designing multilingual web sites. Knowing I had to write this paper spurred me to gather as much information on the subject as possible. Since the project has run on for over a year with highs and lows due to volunteer web site members (including myself), I have collected quite a bit of information.

Evidence of what I learned about cultural differences is not obvious on multilingual web pages visited. I have remarked about this to fellow technical communicators and have puzzled about it myself. This forced me back to reviewing design principles in general that I have learned at Bentley College and elsewhere. What I am proposing is that the following two statements currently are in effect concerning globalization of documentation.

DIFFICULTY IN CREATING APPROPRIATE DOCUMENTATION INCREASES
PROPORTIONALLY WITH DIFFERENCE BETWEEN AUTHOR AND END USER

END USER TOLERANCE IS EQUAL TO SUM/DIFFERENCE OF USER'S NEED,
NOVELTY OF PRODUCT, AND CREDIBILITY OF COMPANY/PRODUCT

I believe that the answer to why I'm not seeing much difference in web sites, regardless of country of origin, is contained in the second statement. I interpret this to mean:

- The web is a novel product and any web site that can be read in a local language, especially one from a creditable company or about new products, is tolerated.
- With no previous history to draw from, web design and techniques are being copied worldwide.
- There are no customs inspectors for web products.
- Simple, modernist designs have less chance of offending a culture.

As to the first statement, companies may already be transferring to the web what was previously learned by hard knocks about globalization of printed documentation and software products. Sites I viewed appear to be making the effort to decrease differences between cultures and give no offense. That's good – because as the novelty of the world wide web wears off, we can expect to have to consistently address the issues covered in the remainder of this white paper.

Horror Stories

Everyone who sells to a global market probably has one...a *faux pas* committed from lack of knowledge. A picture of a female nurse bending over a male patient in a first aid booklet going to Arab countries. A product name for a plotter that means something else in Japan. An installation guide that causes Spanish or Russian-speaking people to laugh out loud. As end users of Asian-manufactured goods, you and I have probably chuckled a little when following the assembly instructions for a gizmo.

Such hard lessons forced communicators into awareness that globalization and/or localization means more than just translation. As Nancy Hoft states in her book, *International Technical Communication*, there are seven variables, or areas of concern, when localizing a product. And many of the rules that govern these areas are beneath the surface...inherent in the makeup of a society.

- Political
- Economic
- Linguistic
- Religious
- Educational
- Social
- Technological

Localization Tidbit – Locale

Translation and localization are not the same thing. A locale is a combination of a language and a location where the language is spoken.ⁱ Localization also may need to embrace the birth origin of possible residents. Consider an European Community employee who is a native of Greece but living and working in Brussels who needs to use both Belgian Dutch and French in his/her work scenario.

How variables in each of these areas might impact multilingual web site creation is addressed in the following sections.

Political

An articleⁱⁱ in May 2000 issue of *intercom*, STC magazine, gives some examples of political considerations when preparing documentation for another country. In India a writer and publisher can be jailed for including a picture of a currency note; the charge would be counterfeiting.

The map of India poses similar problems. Any map of India coming into the country must agree with the Archaeological Survey of India. Microsoft Corporation had to withdraw a map published in one of its software packages.

The flag of India must have the Ashoka Chakra, the blue wheel, in the center of the flag. The omission of the complete wheel on a furled flag, while not against the law, is unacceptable.

Those from Taiwan may not consider themselves Chinese. Quebec wants all documentation in Canada to be available in both English and French. There are cultural communities within the United States where Spanish and other languages are the norm.

And which country's map should be used to represent Spanish on a splash page when entering a multilingual website? If you opt for a Java drop-down list of countries as our site did instead, which should be the default choice? Check [our site](#) to see our choice.

Economic

Doing business in a global community obviously involves identifying differences in how each economy indicates dates, time, currency, telephone numbers and mail codes. When planning an event, you want everyone to show up at the same time on the same day of the same year. Comparing the dates in the chart below shows just how important that could be. Or consider buying airline tickets to the UK or selling tea in Asia if the departure dates and/or costs are not understood. Rather than listing multiple versions of the same date or cost, it is better to customize content by countries.

Economic considerations also include knowing the buying patterns of people in these communities. Planners of an online shopping mall need to consider that Brazilians and Italians like to see and touch merchandise before purchasing.

Localization Tidbit – Pattern

When localizing software, programmers utilize patternsⁱⁱⁱ to determine the correct formats to apply for day/date/time, currency, percentages/decimals, *et cetera*. These patterns can also be applied when creating HTML pages on the fly for web delivery. The chart below lists some examples of patterns that need to be considered:

Pattern	Characteristics	US	Other Countries^{iv}	
Numbers	Leading or trailing zeros Grouping of digits Separators used	1,000,000 1.5000	Germany Sweden France France	1.000.000 1 000 000 1.000.000 1,500
Currency	Look of monetary amount	\$157	England	£100
Date	How month is indicated Order of month, day, year Separators used	March 1, 1998	France Germany Sweden Italy	1 mars 1998 1.Marz 1998 98-01-03 1.3.98
Time	Clock used (12 or 24 hour) Indicators	8:35 p.m.	France Germany Sweden Venezuela	20:35 20.35 kl20.35 8:35

Linguistic

When you think of globalization, language is the first thing that comes to mind. In person-to-person contacts other indicators, such as body language, can be perceived without actually exchanging words. When communicating via telephone, product brochures, or the web, linguistic concerns are paramount. Someone (customer) needs to understand your (producer's) intent.

Issues related to the linguistic area are grouped in the following categories.

One or More Languages per Country

Many countries speak English, but there are various dialects. Is British or American English more appropriate? Then there are countries with two common languages, such as Belgium, India, and Canada.

Which Languages?

How many and which languages a company has translated typically depend on the company's customer base and markets. At Gerber Technology, we routinely translate product brochures and a magazine into French, Spanish, German, Italian, and Portuguese. We opted to make Latin American Spanish our first multilingual web site because this is an area where our global market share is growing. Brazilian Portuguese may be our next site for exactly that reason. And the Chinese market is now opening to our company.

Translation Issues

Technical terms and computer terminology can vary even in countries where a common language is spoken. This is true of Spain and Latin America, Brazil and Portugal, France and Quebec, Canada, where actual antagonism exists if the correct terms are not used. But don't we as Americans quickly label a book British if we flip through and see *colour* instead of *color*. Even my word processor objected to that spelling in the previous sentence. The best choice seems to be to hire or use translators native to the specific market you want to reach.

Consideration during the design phase must be given to text expansion. This can increase as much as 30% from the English text. Room must be allowed in navigation bars for this expansion. We had to add a table in our horizontal navigation bar in order to correctly align a second row of buttons. Graphics with text should be created using a tool, such as PhotoShop, that allows layers: graphic on one layer, text on next layer(s).

Read left to right vs. right to left

The web page layout will need to reflect the fact that certain languages may not read from left to right: Hebrew and Arabic specifically. Using a Cascading Style Sheet (CSS) would be one method to accommodate this difference. Or simply create a separate template for those countries.

Deployment Issues – Fonts and Character Sets

Imagine typing on a keyboard with hundreds of characters instead of the 26 characters of our alphabet. Then consider the extra information that must be encoded for the computer to recognize all of those characters. Of course, printing without the correct fonts installed on your computer yields gibberish.

This is a dilemma facing multilingual web site developers. Chinese, Japanese and Korea languages require not only a unique font set but also a computer that is able to handle font sets requiring more than 8 bits of information. Actually, I found out this week (June 2000) that Chinese will be either the second or third language translated for our web site. More learning lies ahead!

On the next page there are some strategies currently being used for dealing with multi-byte character sets.

Embed fonts in GIF or PDF files

The cheap and dirty way is to create documents and then convert them to a GIF image. This is similar to scanning an article and attaching it as an image in an email message. In this case, each HTML page is made up of one image. Or PDF attachments can be used to embed the fonts for these languages.

Pro – Anyone can view/print without having to install special fonts on local machines.

Con – Requires large download times.

Browser support

Browsers now can translate languages on the fly. Even though results are less than perfect, you would be able to get the gist of what is being said.

Pro – Implemented in chat rooms, etc. this works very well.

Con – Professional sites would find this strategy less acceptable.

Unicode

Currently in development is a strategy that would allow anyone in the world to type into a localized keyboard and create a character set that could be received and printed from any other computer in the world. Unicode is the name of this strategy and is being researched and planned for implementation as I write.

Pro – Would resolve these problems

Con – Is not developed yet and must be implemented globally

Religious

Know your audience. This especially is true when communicating with cultures which have other than a Judeo-Christian heritage. What we in the United States describe as “Oriental”, is actually composed of Hindus, Buddhists, and Taoists and other religious adherents. These groups have sacred symbols including animals and colors that should not be used in a casual or inappropriate manner. For example, Hindus consider yellow a sacred color.

Educational

Images Train and Communicate

A picture can be worth a thousand words. For a multilingual web site this is true for various reasons. In India where illiteracy is a significant problem, video mail rather than email is being considered. This would be implemented with graphics and sound. In literate Japan, graphics (including cartoon characters) are used to convey concepts and make learning fun.

On computers, symbols and icons are used routinely to represent concepts/features. The “?” is used as a symbol in the United States for getting help, while the “i” symbol may be used for help in other countries.

Social

Words

Avoid using puns, play on words, and acrostics. These cannot be translated successfully and/or may cause offense.

Graphics

While symbolism is a useful tool employed to train and instruct across multiple audiences, there is a danger of crossing social rules and taboos in other cultures. For this reason, we should strive for a clean, universal appeal. For instance, buttons might be defined by similarity of color and location rather than by an icon.

Keep in mind that it is the very nature of all graphics (not just icons) that they symbolize, imply, or represent something. Marketing campaigns hire older TV stars to advertise insurance and bedding to an aging audience. Or a skateboarding teen advertises soda pop or chewing gum. Each character is chosen to symbolize the target audience enjoying/using a specific product. Consider that frenetic animations are less apt to appeal to the mature generation.

When choosing graphics for multilingual sites, consider the following areas.

People



- Race – Abstract, devoid of bone structure, hair style; see our Gerber mentor figure above.
- Gender – No physical contact between sexes, no gender stereotypes; no one gender in power over the other; no exposed female body parts.
- Hand gestures – Stylized (no gender); right hand preferred (using the left hand is considered unclean in some countries); manipulating a known (identifiable) object like a keyboard is acceptable.

Colors

Blue	Bad in Japan and Iran; implies trustworthiness in US
Green	Bad in Thailand, France for packaging, and countries with dense green jungles; implies rich in US
Purple	Bad in China and Latin America (death)
Red	Bad in Ivory Coast (mourning); danger in Europe, North America, and Japan; joy when combined with white in Eastern cultures
Yellow	Sacred to Hindus
Orange	Implies inexpensive product in US
Brown	Bad in Columbia for packaging
Pastels	Implies trust in Korea

Animations

Latin American web sites employ animation extensively while others might prefer a tasteful Flash interactive instead.

Technological

Terminology Used

Computer and other technical terms may differ within the same language depending on location. We experience this whenever we translate our documentation into Spanish and then send it to Spain and South America. Our reviewers consider the results laughable at best. They helpfully point out changes more suitable for their specific audience. Many companies, including ours, do not have the resources to maintain separate Spanish documents.

Emergency phone numbers may differ; in New Zealand people dial 111 instead of 911.

Distribution

In countries with limited access to the web, scrollable pages are preferred. They can be printed and read off line. Also preferred in Japan are home pages that give an overview of all contents on the site. This too shortens the amount of time required on the web. This issue should disappear as bandwidth and accessibility to the web increase.

ⁱ Locales and Resources in Windows CE by Bill Hall, pg 31-34, *MultiLingual Computing & Technology*, V11 I3

ⁱⁱ The India Paradox by Gurudutt R. Kamath, pg. 10-11, *intercom*, May 2000

ⁱⁱⁱ Displaying International Numbers and Currency, pg 54-58, *MultiLingual Computing & Technology*, V10 I5

^{iv} International Integers and Intercultural Expectations, pg 25-27, *intercom*, May 1999