

# Conveying Translated Informed Consent Concepts: Effects of Language and Culture on Interpretation of Legally Required Messages<sup>1</sup>

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## Abstract

This paper explores the unique and shared communicative difficulties of conveying translated survey informed consent messages observed across ten language groups. We examined results from two cognitive testing projects conducted by the U. S. Census Bureau in 2006 and 2008, with a total of 256 cognitive interviews in ten target languages. Findings suggest that comprehension and interpretation issues for particular informed consent messages were routinely identified. In this paper, we systematically analyzed the types of messages that worked well, that were conceptually difficult to translate effectively, or that failed to convey. We further explored linguistic and socio-cultural barriers for successful communication of these messages and offered strategies to overcome these challenges.

**Key Words:** informed consent messages, survey participation, translation, language and culture

## 1. Introduction

In the course of obtaining respondents' cooperation during a data collection effort, research organizations must follow prescribed guidelines in conveying certain information to those contacted. Such practices, typically referred to as gaining "informed consent," help educate potential respondents about various aspects of the survey so they may make an informed decision regarding their participation. Topics broached with respondents are shaped by federal law, because certain messages are legally required, and by ethical standards related to human subjects research. Informed consent topics, or "messages," often include an explanation of the survey's purpose, uses for the data, confidentiality assurances, the voluntary or mandatory nature of the survey, an estimate of response burden, and the legal authority under which data are collected.

Communicating these survey messages to English-speaking respondents is sometimes challenging. Conveying them in languages other than English adds complexity. A sizeable body of literature on informed consent messages in the context of survey participation pinpoints how cross-cultural issues may impact informed consent. Some of

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<sup>1</sup> This paper is released to inform interested parties of research and to encourage discussion. The views expressed are those of the authors and not necessarily those of the U.S. Census Bureau.

the most important issues raised in regard to obtaining informed consent from respondents in diverse cultures include differing philosophical paradigms (Levine, 1991; Barret and Parker, 2003), translation issues (McCabe, Morgan, Curley, Begay, and Gohdes, 2005; Bulmer, 1998), literacy concerns (Barret and Parker, 2003; Barata, Gucciardi, Ahmad, and Stewart, 2006), and matters of trust ((McCabe et al., 2005; Whittington, 2003). All these studies highlight the intricacy of conveying informed consent messages across language and cultural groups.

It is, however, important for speakers of languages other than English to understand the translated informed consent messages presented to them in the context of a data collection effort. Until recently, such messages only appeared in English-language materials (i.e., survey cover letters and informational brochures) for the U.S. Census Bureau's American Community Survey (ACS). To address these informed consent concerns and improve response rates among linguistically isolated households<sup>2</sup>, the Census Bureau developed translations of four ACS materials<sup>3</sup> in ten target languages: Spanish, Chinese, Korean, Russian, Vietnamese, Arabic, French, Haitian-Creole, Polish, and Portuguese.

Two studies, jointly conducted by the U.S. Census Bureau and RTI International, cognitively tested the translations of documents with monolingual speakers of the aforementioned ten language groups. The two studies tested the same set of ACS materials, with different language groups. The first study was conducted in 2006 and it cognitively tested the translations of the four ACS documents in five languages: English, Spanish, Chinese, Korean, and Russian. The second study was conducted in 2008 in six additional languages: Vietnamese, Arabic, French, Haitian-Creole, Polish, and Portuguese.

The purpose of this paper is three-fold. First, it reports the main findings from cognitive interviews in these two studies. Second, it aims to determine how the translated survey informed-consent messages were perceived and interpreted by speakers of different language groups. Third, it identifies some of the language and socio-cultural barriers for successful communication of these messages to the target populations.

## 2. Background

### 2.1 American Community Survey (ACS)

Since the two studies cognitively tested the American Community Survey's computer assisted personal interview (CAPI) materials, it is necessary to give some background information about the ACS to contextualize the current study.

The ACS is a general purpose survey conducted by the Census Bureau. It is a monthly sample survey, conducted in multiple sequential modes. The first data collection mode is mail out/mail back, with the questionnaire mailout in English only. The Spanish

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<sup>2</sup> Linguistically isolated households refer to those households in which no person aged 14 or over (1) speaks only English; or (2) speaks a non-English language and could speak English "very well" (see Shin and Bruno 2003).

<sup>3</sup> The four ACS materials are the ACS Introductory Letter, Thank-you letter, ACS Information Brochure, and ACS Q&A Brochure.

questionnaire is available upon request. The second data collection mode is computer assisted telephone interviews (CATI) to reach the sampled households that do not mail back the ACS questionnaire. The CATI instrument is available in English and Spanish so CATI interviewers can administer the interview in one of the two languages. For languages other than English and Spanish, the Census Bureau telephone centers have interviewers on staff who are fluent in some languages and can translate the ACS questions on-the-fly. The third data collection mode is computer assisted personal interviews (CAPI). This mode touches the hard core of non-response households. That is, when the CATI mode cannot reach certain households in the sample, a subset of households will be sub-sampled for personal interviews in the CAPI mode. Like the CATI instrument, the CAPI instrument is available in English and Spanish. For other languages, field interviewers have to translate on-the-fly or to use interpreters. One important point to mention is that it is required by law to participate in the ACS if a household is selected in the sample.

## **2.2 Translation Needs**

According to the Census Bureau data, there is an increasing level of immigration and the surge of limited-English-speaking populations in the U.S. Based on the 2003 Current Population Survey, the foreign-born population makes up about 12% of the U.S. population. There is also a shift of country of origin in immigration from European countries to Latin American and Asian countries. Among the foreign-born, 53% were born in Latin America, 25% were born in Asian countries, and 14% were born in European countries<sup>4</sup>.

With the growth of the non-English-speaking population in the United States, there is an increasing need for translation of survey documents in order to encourage survey participation, and to convey legally required messages. To meet these needs, the ACS developed translations of an ACS Introductory Letter, Thank-you letter, ACS Information Brochure, and ACS Q&A Brochure. These materials were intended for ACS field interviewers to use in the CAPI operation to overcome language barriers in data collection efforts. These materials convey some legally required messages, including the mandatory nature of the ACS, the confidentiality assurance, the purpose of survey, its data usage, and the request for survey participation.

## **2.3 Past Research**

Past Census Bureau research, both qualitative and quantitative, suggests that informed-consent messages in English are more effective when they are delivered in a respondent-friendly manner, meaning that messages are written in plain language that is easily accessible to the average person. For example, Landreth (2001 and 2003) used cognitive interviewing techniques to explore respondents' interpretations of legally required messages embedded in survey letters. She found overly-technical messages were perceived as "bureaucratic mumbo jumbo" or "boilerplate." As a result, respondents often ignored these important informed-consent messages.

Based on this early work, a split-panel experiment with survey letters was conducted with the ACS (Griffin et al., 2004; Raglin et al., 2004). There were four panels in this experiment: two were "voluntary" letters<sup>5</sup> and two were "mandatory" letters<sup>6</sup>. Within

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<sup>4</sup> See Larsen, 2004.

<sup>5</sup> "Voluntary" letters refer to letters with a message stating that participation in the ACS is voluntary.

each of these two experimental conditions, there were two versions of the letter. One was the standard version, the other was version designed according to “respondent-friendly” principles. Respondent-friendly merely refers to messaging that has been carefully organized and conveyed in plain language. In both conditions, the “respondent friendly” versions achieved small but significant differences in mail response rates compared to the standard version.

Results from the previous research showed the importance of crafting survey messages in a language that can be understood by respondents. This principle applies to English as well as in translation from English into other languages. Translating survey messages into languages other than English meets even more challenges. This study demonstrates the obstacles in the conveying the survey messages in languages other than English and the effects of language and culture on our respondents’ interpretation of and reaction to the legally required messages.

### **3. Our Research**

The focus of the current paper is on how translations of these legally required messages were perceived and interpreted by monolingual speakers of the ten target languages based on results from the two cognitive testing studies. The cognitive testing set out to evaluate the adequacy and appropriateness of the translations, and at the same time, to determine how well informed-consent messages were received by speakers of the ten target languages.

#### **3.1 Methodology**

As mentioned earlier, there were four ACS supporting documents that were cognitively tested in the two studies, including an introductory letter, a thank-you letter, an ACS information brochure and an ACS Question & Answer brochure. These documents were translated from English into ten target languages.

For the two studies, a total of 256 cognitive interviews were conducted, with 24 interviews in each of the ten target languages, and 16 English interviews. English interviews were included as a baseline for comparison to see whether respondents who read translated documents had a similar understanding of the intended communication as English-speaking respondents, or if problems identified were issues residing in the English original rather than in the translation. The cognitive interviews were conducted in multiple research sites across the nation.

For each language group, a team consisting of three to four language experts was organized. The language team members were bilingual in English and the target language. Language team members were selected based on their language proficiency (native speaker’s proficiency), cultural knowledge (education and work experience in the target culture), and translation experience. In addition, five out of the ten language teams were led by a bilingual survey methodologist. The language experts worked as a team to recruit and conduct the cognitive interviews, summarize findings, conduct the analysis, and recommend changes.

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<sup>6</sup> “Mandatory” letters refer to letters with a message stating that participation in the ACS is mandatory.

Prior to the conduct of cognitive interviews, a two-day training session was provided for all language teams on cognitive interviewing techniques and research objectives. The training also provided guidance on how to administer a cognitive interview in a culturally appropriate manner.

The interview protocol was developed in English with specific probes and research objectives. The team of language experts translated the interview protocol into a target language following a modified “committee approach” in translation<sup>7</sup> (Schoua-Glusberg, 1992).

ACS data were used to summarize the demographic characteristics of the linguistically isolated households interviewed in CAPI. Respondents were recruited based on these data and therefore their characteristics should be similar to the survey respondents who would likely need to see the translated materials in the target languages.

### **3.2 Messages in ACS Survey Documents**

During the cognitive interviewing, we tested and analyzed seven messages covered in the ACS materials. The following is a list of the messages:

1. Request for survey participation
2. Survey purpose
3. Survey sponsor
4. Data uses
5. Confidentiality assurance
6. Mandatory nature of the survey
7. Estimate of amount of time needed to complete the survey (i.e., response burden)

Based on the cognitive interview summaries of each language group, each language team carefully analyzed respondents’ interpretations of, and reactions to, the seven main messages included in the ACS documents. Each language team was instructed to summarize their findings of how well these messages worked according to the following definitions.

1. Messages that worked well: That is, respondents showed a good understanding of the message. They understood the message’s intended meaning, scope, or request. This means the message achieved its communicative intent.

2. Messages that showed potential problems: That is, respondents either partially understood the message, or only understood its literal meaning, but the intended meaning, scope, or the request of a message was not fully conveyed. The message could also be deemed potentially problematic if it had some negative impact on the respondents.

3. Messages that were very problematic: These messages failed to convey in the target languages. The respondents did not understand the message at all or they were very confused by the content of the message.

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<sup>7</sup> For each language, a team of three language experts worked independently, each translating one third of the protocol. After they completed their translations, team members met to review the translated items, one by one, as a group. Each translator contributed to the discussion with the aim of improving and refining the first translation, making sure that it reflected the intent of the English original probing questions and flowed well in the target language. The intent of the English probing questions was specified by research specifications set out in the cognitive testing research plan (see Pan et al., 2006).

## 4. Results

### 4.1 Summary of results

Figure 1 is a high level summary of how the seven messages worked for all the 11 language groups in both the 2006 and 2008 studies. Please note that our 2006 study included the first five languages in this figure. For the purpose of presenting our results, we used a weighted score for each cell:

- 5 points for message that worked well
- 3 points for messages that showed potential problems, and
- 1 point for messages that were very problematic.

The total and average scores are provided at the end of each column and row. The column's average score indicates how well or poorly each message performed, while the row's average score indicates how well or poorly the suite of messages were conveyed for a particular language group. This scoring convention is used for heuristic purposes only; no statistical tests were conducted and no statistically significant results are implied.

**Figure 1: Performance of messages by language group**

Language group	Effectiveness of messages							TOTAL	Average Score
	Survey Participation Request	Survey Purpose	Sponsor	Data Uses	Mandatory	Confidentiality	Response Burden		
English	5	3	5	5	5	5	5	33	4.7
Spanish	5	3	3	5	3	5	5	29	4.1
Chinese	1	1	5	5	3	3	5	23	3.3
Korean	1	3	5	5	1	3	5	23	3.3
Russian	5	3	5	5	3	5	5	31	4.4
Vietnamese	1	1	5	5	1	3	5	21	3.0
Arabic	5	5	5	5	5	5	5	35	5.0
French	5	5	5	5	5	5	5	35	5.0
Haitian-Creole	5	3	1	5	5	5	5	29	4.1
Polish	5	5	5	5	5	5	5	35	5.0
Portuguese	3	5	5	5	5	5	3	31	4.4
<b>TOTAL</b>	<b>41</b>	<b>37</b>	<b>49</b>	<b>55</b>	<b>41</b>	<b>49</b>	<b>53</b>	<b>325</b>	
<b>Average Score</b>	<b>3.7</b>	<b>3.4</b>	<b>4.5</b>	<b>5.0</b>	<b>3.7</b>	<b>4.5</b>	<b>4.8</b>		

Based on this summary, the data uses message worked well across all language groups (an average score of 5.0 points). This was due to the fact that this message successfully conveyed the information of how the ACS data could be used to meet the needs of local communities and to improve public facilities like schools, hospitals, highways, and fire stations. This message contained specific examples of data uses that were relevant to respondents. The response burden message also worked well for all of the language

groups except one (average score of 4.8). This message was simple and short (“It is estimated that it takes 30 minutes to complete the survey”).

The most problematic message was the “survey purpose” (3.4 average score). In general this message did not work well with the first set of five language groups in the 2006 study. It showed potential problems for four out of five language groups, and was very problematic for one language group. So we revised it for the 2008 study. It worked better in the 2008 study because four out of six language groups had a good understanding of the message.

The next most problematic messages include the survey participation request and the mandatory nature of the survey, with each receiving an average score of 3.7. The survey participation request message completely failed for all the three Asian languages. The confidentiality message showed potential problems for three language groups, with an average score of 4.5 points. The survey sponsor message also has an average score of 4.5 points.

Another important finding is that the Asian language groups (i.e., Chinese, Korean and Vietnamese) showed more problems, overall, compared to the other language groups. Of the seven messages, the same four messages (survey participation request, survey purpose, mandatory, and confidentiality) did not work well for the three Asian language groups. The average score for the Chinese and Korean groups was 3.3 respectively, and was 3.0 for the Vietnamese group.

#### **4.2 Analysis of problematic messages**

In this section, we focus our analysis on the four problematic messages: survey participation request, survey purpose, mandatory nature of the survey, and confidentiality assurance message. Cognitive testing results suggest that these four messages showed the biggest challenges for more than two language groups. One message, the survey sponsor message, was problematic for two language groups, and this was mainly due to translation errors that could be easily corrected. For this reason, we omitted it from our current analysis.

Our analysis was guided by one basic principle in sociolinguistics—that a language is inseparable from the culture and society in which it is used. Language use inevitably reflects cultural values and social practices in a given culture. In order to tackle problems in translation, we need to analyze not only linguistic rules that govern the sentence structure or word order of a specific language, but also the cultural norms of expressing certain concepts and the social practices encoded in linguistic expressions. In other words, there are three components that we need to consider in our analysis: linguistic issues, cultural norms, and social practices. Linguistic issues refer to two kinds of issues: the general rules governing the use of language for information exchange, and the language-specific rules, such as the sentence structure or discourse structure of a language that may be different from the English language, which can result in different presentation of a survey message in a target language. Cultural norms refer to the ways of doing certain things in a given culture, such as appropriate level of politeness in expressing a message. Social practice here refers to the practice of survey research as a means for data collection in a society.

These three components are interrelated and influence one another. For example, if a culture places high value on certain things, such as hierarchical structure, it is very likely that its language has many terms to express the hierarchical order between speakers (e.g., Chinese and Japanese cultures, see Pan and Kadar, forthcoming; Matsumoto, 1988). In the same analogy, if a concept, such as a survey, does not exist in a culture, it is very likely that there is no linguistic term available to describe that concept. Our analysis of the four problematic messages demonstrates that we need to find solutions to address issues surrounding these three components to successfully communicate important survey messages in languages other than English.

#### 4.2.1 Survey participation request

The survey participation request is conveyed in the ACS introduction letter, stated in the following paragraph:

*“Dear Resident:*

*The U.S. Census Bureau is conducting the American Community Survey. A Census Bureau representative will contact you to help you complete the survey. I would appreciate your help, because the success of this survey depends on you.”*

This is the very first paragraph of the ACS introduction letter. It requests that letter recipients participate in the ACS. This message failed to deliver for the three Asian groups and had potential problem for the Portuguese group as shown in Figure 2.

**Figure 2: Problem severity of the survey participation request by language group<sup>8</sup>**

	Language			
	Chinese	Korean	Vietnamese	Portuguese
Problem severity	1	1	1	3

The problem with the Asian language groups was mainly due to the differences in letter writing styles between the English language and Asian languages. Respondents in the three language groups of Chinese, Vietnamese, and Korean did not understand that the letter was asking for their participation. Instead they focused their attention more on other information presented in the latter part of the letter, such as data usage message and legal requirements. The three Asian language research teams traced this to differences between Asian and Western ways of structuring a letter.

The English letter writing style follows the preferred norms of communication in American English, which aims for clarity-brevity-sincerity or C-B-S style in professional communication (Lanham, 1974)<sup>9</sup>. An English-language letter typically starts with the

<sup>8</sup> As stated on P5, a score of 1 means “very problematic” and 3 means “potential problem.” The same applies to all figures therefore.

<sup>9</sup> Scollon and Scollon (2001) traced this C-B-S style to the ideology of the Enlightenment of the seventeenth and eighteenth centuries. They argue that the C-B-S style represents the preferred style of what they call the utilitarian discourse system. This is the dominant communicative system in the business and governmental world, which began with the Utilitarian philosophers but is now seen wherever Euro-American utilitarian values are present.

main point and then progresses to the background information. The ACS introduction letter starts with a straightforward request at first, and then discusses the background information of what the ACS covers, and how its data are used.

Discourse studies demonstrate that various cultures show different preferred discourse structures in writing (e.g., Kirpatrick, 1995; Bhatia, 1994; Scollon and Scollon, 2001). The letter writing style in East Asian languages tends to first attend to the politeness aspect of communication and to establish common ground before going to the main point. The main message generally comes towards the end of letter after the necessary background information is provided. Empirical studies have shown that the differences in topic introduction have caused confusion and miscommunication between Asians and speakers of Western languages (e.g., Li, 1999; Scollon and Scollon, 1991; Young, 1994). It is very likely that our Asian respondents were affected by this phenomenon: they were looking for the main point towards the end of the letter and missed the survey participation request that was presented at the very beginning.

The survey participation request message showed potential problems for the Portuguese respondents as well. Many of the Portuguese respondents thought the main purpose of the letter was to inform them about community programs. The Portuguese language team pointed out that the first paragraph of the letter started with a request without any explanation or definition of the ACS. Some Portuguese respondents did not have prior knowledge of surveys conceptually and therefore had no clue about what was being asked of them in the letter.

One issue worth mentioning is that although the survey participation request did not present a problem for the Spanish group, many Spanish respondents thought that the ACS was intended for residents with permanent residence status in the U.S. This misinterpretation was a result of the salutation “Dear Resident” in the ACS introduction letter. The word translated “resident” in Spanish was interpreted as “permanent resident.” This shows that although a term might be correctly translated, respondents may have a different interpretation of the term.

#### *4.2.2 Survey purpose message*

The survey purpose message appeared in all four ACS documents that were tested. In the second paragraph of the ACS Introductory Letter, the message was phrased with following wording:

“The American Community Survey produces critical up-to-date information that is used to meet the needs of communities across the United States.”

We identified two major issues with this message from the results of the two cognitive testing studies. One was that the presentation of this message did not provide enough of the context necessary for understanding the message. The other issue was the lack of social practice of survey research for certain language groups, which caused confusion regarding what a survey was.

For the first issue, from a functional linguistics perspective, a statement should start with the “given” information (that is, the familiar or old information), and thus leave the reader time to prepare him/herself for the new information presented later in the statement (Finch 2005). The “given” information also provides necessary context or

background for the “new” information. If this linguistic rule is violated, the reader will have difficulty processing the information.

The 2006 study results show that this message had problems with all five language groups, including the English group, largely due to the fact that there was not enough contextual or background information given in the statement itself. Respondents from the five language groups did not know what information the ACS was collecting or what kinds of questions were asked in the ACS. Figure 3 shows the problem severity among the five language groups.

**Figure 3: Problem severity of survey purpose message by language group**

	Language				
	English	Spanish	Chinese	Korean	Russian
Problem severity	3	3	1	3	3

To address the issue of lack of context and background information, we added one paragraph in the ACS letter to explain what questions were asked in the ACS. The added paragraph together with the original statement was tested in the 2008 study.

“The American Community Survey produces critical up-to-date information that is used to meet the needs of communities across the United States. The survey will ask you questions about your household’s characteristics, including such topics as education, employment, and housing.”

The revised version was tested in the 2008 study with the second set of six languages. The new version seemed to work better. Delivered in the new version, the message had potential problems for only one language group (Haitian Creole) and was only problematic for the Vietnamese group. Both the Haitian Creole and Vietnamese respondents believed that the ACS was specially designed for the Haitians and the Vietnamese, and was meant to inquire about living situations for these target populations in America. They got this interpretation because the survey materials were printed in the target languages (i.e., Haitian-Creole and Vietnamese). This suggests that even the language for printing has some effect on the interpretation of a particular message. The Vietnamese translation was also problematic because of the current translation of “The U.S. Census Bureau,” which is literally translated as “The U.S. Office of Examining Population.” Thus, it carries an unnecessary connotation which may make people think of investigating people rather than the true purpose of the ACS.

For the Chinese group, the message was very problematic due to another issue. That is, the literal translation<sup>10</sup> of the survey name “the American Community Survey” as “American Community Investigation.” Many Chinese-speaking respondents were not familiar with the notion of a survey. They had no clue that there was a set of questions they were supposed to answer in a survey. They had to draw upon their own cultural knowledge to interpret the term “survey.” Most of them interpreted the American

<sup>10</sup> Literal translation refers to word-for-word translation without any cultural adaptation in the translation process (see Pan and de la Puente, 2005 for more details).

Community Survey as the “American Social Investigation.”<sup>11</sup> They thought that the ACS was designed to elicit their opinions or complaints about their communities. This interpretation could deeply affect Chinese-speaking respondents’ participation in the survey. Cognitive interview results showed that many Chinese respondents were reluctant to participate in the ACS. They reported that they did not know much about their communities, or they did not have any complaints about their communities.

To address the issue of the misinterpretation of the survey name from Chinese respondents, we had to adapt the translation of the survey name by adding the term “questionnaire.” The Chinese translation of the ACS is now literally translated as “American Community Questionnaire Survey” so as to differentiate it from the concept of “social investigation.” Results from the second round of Chinese cognitive interviews show that the revised survey name was better understood by Chinese respondents.

*4.2.3 Mandatory nature of the survey*

One important message conveyed in the four ACS materials is the mandatory nature of the ACS. By law, if a household is selected in the sample, the household is required to participate in the ACS. So the message cites the law and states that:

“You are required by U.S. law to respond to this survey (Title 13, United States Code, Sections 141, 193, and 221).”

This message showed potential problems for the Spanish, Chinese, and Russian groups, and had severe problems for the Korean and Vietnamese groups, as shown in Figure 4.

**Figure 4: Problem severity of mandatory nature message by language group**

	Language				
	Spanish	Chinese	Korean	Russian	Vietnamese
<b>Problem Severity</b>	3	3	1	3	1

The translated message had linguistic issues and issues with cultural norms, and social practices as well. For example, the Vietnamese translation of this message was incomplete because the translation did not specify “what” was required by law. Half of the Vietnamese respondents missed the mandatory message. They understood the law required people to do something, but did not know what that was.

This message caused some negative feelings among the Korean respondents mainly due to the direct way this message was communicated. This could be interpreted as overly direct or even rude in Korean. The Korean respondents found it strange to see this command-like statement in a letter, as they would expect the statement to be hedged by some linguistic politeness strategies. They commented that the tone in the statement was

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<sup>11</sup> A social investigation in Chinese refers to the investigation carried out by local or central governments to look into issues or complaints reported to the government by local residents or neighbourhood committees.

very harsh and rude. From their cultural norms, they expected a higher level of politeness in a government document.

Respondents in Spanish, Chinese, Korean, and Vietnamese language groups showed confusion between the procedures for the cognitive interview and the actual ACS. They referred to the consent form for the cognitive interview study that they had signed prior to being interviewed. The consent form stated that the cognitive interview was voluntary. Now that they saw the message that the ACS was mandatory, they had a hard time understanding why. They thought they had already participated in the ACS. This is due to their lack of survey experience, misinterpretation of the ACS as an opinion survey, and possibly confusion between the voluntary nature of the cognitive interview and the mandatory ACS message.

In addition, the three Asian language groups did not perceive the intended message. They thought it meant that people should answer the survey honestly or accurately. They also had a different perception of legal requirements. For example, most Chinese respondents could interpret the message by its literal meaning. That is, the law required people to participate in a survey called the ACS. But they did not believe that they should participate or they thought it was possible to opt out. These Asian language respondents were not familiar with the concept of “legal requirement.” They interpreted it as “if I don’t violate the law, I don’t need to participate in the survey” or “I shouldn’t participate because I don’t know the law cited.” We believe this misinterpretation was caused by the differences in legal systems between the United States and their home countries.

*4.2.4 Confidentiality message*

The last problematic message that we analyzed is the confidentiality assurance message. This message appeared in all four ACS documents. In the ACS introduction letter, it stated:

*“I want to emphasize that any information you give our representative will be kept confidential. By law, the Census Bureau cannot publish or release to anyone any information that would identify you or your household (Title 13, Section 9).”*

Cognitive testing results showed that this message worked well for most of the language groups except for the three Asian languages. But the problem was not too severe. Figure 5 is a summary of the problem severity of this message.

**Figure 5: Problem severity of confidentiality assurance message by language group**

	Language		
	Chinese	Korean	Vietnamese
<b>Problem severity</b>	3	3	3

Respondents in the three Asian language groups could understand the message, but they had some concerns with it. One main concern is that they did not like the strong emphasis on legal aspects, and the amount of information presented to them regarding the legal requirement of confidentiality made them nervous. It discouraged their participation because they said that they did not know the law. One Chinese respondent said: “If you said: ‘it’s required by law’ and stop there, that’s enough.” Another Chinese respondent

said: “For people who are newcomers, they may not believe in U.S. laws. There are differences between China and the U.S. in terms of laws. In China, they (the government) say they will keep (the information) confidential, but they don’t really do it.”

We also noted that, to many Asian respondents, the emphasis on legal requirements might convey the notion that the respondents should have some concerns or worries about the ACS. Some Korean respondents commented that the detailed description of confidentiality, partially signaled by the citation of Title 13 US Code, caused doubt and fear because it reminded them of legal enforcement and deportation. So the bottom line is that what to say, how much to say, and how to say it are all important in conveying the message, as well.

## **5. Conclusions**

In this study we identified main issues that hinder comprehension and interpretation of some key survey messages. We argued that issues under consideration for successful translation of survey messages should include the three components of linguistic rules, cultural norms, and social practices. By identifying these issues, we will be in a better position to find solutions to problematic messages. Based on the results from these two cognitive testing studies, the American Community Survey made some significant changes to the original English version as well as the translated versions of the four ACS materials, so that the messages conveyed in these documents can be better understood by most respondents.

### **5.1 Lessons Learned**

We also learned some important lessons from the two studies. First, the English version should be “respondent-friendly” to begin with. The English version needs to be written with clear and understandable language. It should also provide sufficient context and background information.

Second, there is no one single factor that hinders successful translation of informed-consent messages. Translation problems are more than linguistic issues. In addition, translation issues fall into two categories. One is poor translation, which is relatively easy to fix. The second category is different or unfamiliar discourse structure, such as letter writing style, which is more challenging. We were not able to fix this problem after the two studies because it involved re-structuring the letter in target languages, which calls for further study.

Third, there are socio-cultural factors affecting our respondents’ comprehension and interpretation of translated messages. These issues are even more challenging. We are facing the challenge of how to communicate a new practice and a new experience to our respondents.

### **5.2 Future Research**

We believe further research is needed to address some of the issues raised in the current study. One area of research is to investigate alternative methods in the conduct of translation. It is our understanding that translated survey materials should be linguistically and culturally appropriate. To reach this goal, we would advocate a discourse-oriented approach to translating informed-consent messages or survey documents in general—that is, we need to take a more holistic view of translation. We need to consider cultural implications of presentation of messages. So instead of word-

for-word or literal translation, we need to start considering other options. One alternative is to consider replacing translations with redrafting by language. That is, survey organizations can produce an English document containing a list of topics and messages to cover, and then set up a language team with translators and survey methodologists to produce a document in target languages with rhetorical and presentation styles appropriate to each language and culture. Finally, the translations need to be pretested with the target populations.

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