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MEMORANDUM FOR The Distribution List

From: Burton Reist *[signed]*
Acting Chief, Decennial Management Division

Subject: Observing Census Enumeration of Non-English Speaking Households in the 2010 Census: Evaluation Report

Attached is the Observing Census Enumeration of Non-English Speaking Households in the 2010 Census: Evaluation Report. The Quality Process for the 2010 Census Evaluations, Experiments, and Assessments was applied to the methodology development, specifications, software development, analysis, and documentation of the analysis and results, as necessary.

If you have questions about this report, please contact Yuling Pan at (301) 763-4950 or Stephen Lubkemann at (301) 763-8601.

Attachment

December 6, 2012

Observing Census Enumeration of Non-English Speaking Households in the 2010 Census: Evaluation Report

U.S. Census Bureau standards and quality process procedures were applied throughout the creation of this report

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Center for Survey Measurement

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EXECUTIVE SUMMARY

This study was conducted during the 2010 Census to observe Nonresponse Followup interviews with households that speak a language other than English, in areas of the U.S. with heavy concentrations of residents with limited English proficiency. A multilingual research team consisting of seven sub-teams in the seven primary languages (Arabic, Chinese, Korean, Portuguese, Russian, Spanish, and Vietnamese) was commissioned to carry out the research in the 2010 Census.

The objectives of this research were to collect extensive qualitative data that could provide an empirical basis for beginning to: (1) identify which linguistic and sociocultural factors appear to affect the enumeration of non-English speaking populations during the Nonresponse Followup interview process; (2) examine the measures that were taken by enumerators to negotiate access to non-English speaking households and to collect the required census data from these households; (3) observe if and how in-language census materials were used in the field; and (4) gain additional insight into how non-English speaking immigrant populations perceived and reacted to the census and its public messaging. Findings from this study will help develop recommendations for the 2020 Census planning process, by identifying issues that should be addressed in order to improve the enumeration process in that subset of the population that has limited, or entirely lacks, English proficiency. Most specifically, the findings in this report may be potentially relevant to further refining the procedures and approaches used to translate census questions; to the re-design of questionnaires and interview protocols for non-English speaking respondents; to developing policies for the use of interpreters in enumeration interviews; and to the development of interviewer training.

This report describes and compares the findings from a set of field studies that were designed to collect comparable data in seven distinct communities of language through ethnographically-informed direct observation and qualitative interviews. The primary data in these field studies were collected through the direct observation of 586 Nonresponse Followup interviews conducted among Arabic, Chinese, Korean, Portuguese, Russian, Spanish, and Vietnamese speakers. Following these initial observations, two additional debriefing interviews were conducted: first, with the respondents, and subsequently, with their enumerators. In each community of language, all observations and debriefing interviews were conducted by a team of ethnographic researchers that was fluent in that respective language and that had extensive prior ethnographic research experience in that community. Three of the seven language teams conducted additional focus groups and in-depth interviews to augment their observational study and debriefing interviews. Each ethnographic research team also observed Nonresponse Followup interviews and conducted debriefing interviews with a comparison group of English-speaking respondents.

In this investigation of challenges in enumerating hard-to-count non-English speaking populations, five sets of research questions were addressed. The questions, and brief summaries of the findings, were as follows:

1. *Enumerator strategies for gaining and maintaining access to non-English speaking respondents*. This set includes an examination of how non-English speaking respondents understood and defined the enumeration encounter as a form of social interaction in ways which predisposed them to participate (or not) in particular ways; how enumerators interacted with these respondents; what linguistic and cultural strategies enumerators sought to employ in order to secure and maintain access to respondents, and to collect required census data.

Findings: This field research identified several key factors that appeared to influence the process of securing and maintaining access to non-English speaking respondents. These factors included: (1) the extent to which enumerators were able to signal shared "in-groupness" (ethnic or other comparable forms of identity) with their non-English speaking respondents; (2) the ability of enumerators to use and respond to their respondents' culturally-specific norms and expectations about social interaction; and (3) the linguistic fluency of enumerators in the respondents' language. While all of these factors appeared to affect the securing and maintaining access to respondents in the seven language communities, our comparison of the findings highlights that the specific way in which these factors played out in each language community was often unique. This finding may have significant implications for the design and implementation of Census Bureau strategies for enumerating immigrant populations that are from various countries of origin and that speak various languages.

2. *Conceptual equivalency of census questions across and within communities of language*. One of the core concerns in this study was to investigate how linguistic codes and communicative conventions as well as other socio-culturally shaped understandings affected how respondents understood and responded to particular census questions. The study also aimed to examine how enumerators responded to the challenge of obtaining the information sought by the Census Bureau under these circumstances.

Findings: One important finding is that enumerators were far more likely to go off script in the interviews they conducted in other languages than tended to be the case when they conducted interviews with English-speaking respondents. Two main problems were identified in terms of questionnaire design and question development that led to the departure of script on the part of enumerators: (1) lack of conceptual equivalency between the ideas invoked by certain English terms and the terms available in other languages; (2) a lack of meta-communicative equivalency, which refers to differences between communicative conventions that frame and inform the meaning of utterances in interaction between native English-speakers in the American context and non-English speakers. Enumerators deployed a range of tactics for coping with conceptual and meta-communicative non-equivalency in the census questionnaire. All of these tactics involved departure from the established interview script to maintain the interaction. This calls for extensive further research in the development of a Nonresponse Followup questionnaire to ensure that the questionnaire conforms to conversation norms in a variety of languages. Research is also needed concerning systematic tailoring in the translation process so that the Nonresponse Followup instrument can function properly in the target language.

3. *Use of in-language materials to facilitate data collection from non-English speaking populations*. The following questions were investigated: whether in-language census materials

were actually used in the field, how effective the in-language tool kit (Job Aid, Language Identification flashcard, language assistance guides) appeared to be in the Nonresponse Followup interviews, and what additional tools might be needed by enumerators in order to successfully complete the task of the Nonresponse Followup interview.

Findings: This study shows that there were two main issues with the effective use of in-language materials for the Nonresponse Followup interview: (1) a general lack of information on how to use available in-language materials in the field. Enumerators did not have much knowledge about or full access to in-language materials that already existed; and (2) not many field-operation in-language materials were available during the 2010 Census. Enumerators only had a Spanish Job Aid provided to them. They had no access to other useful in-language materials such as the standard translation of the 2010 Census questionnaire and the language assistance guides. In some communities-of-language enumerators found that in-language tools helped them significantly in their enumeration of non-English speaking households, and many were desirous of more such materials. However, in other communities enumerators were actually unaware of the existence of materials they could have used, while in yet others such materials simply did not exist. This indicates that there was a great need for more in-language materials, and consistent use of such materials, including the fully translated Nonresponse Followup questionnaire, notice of visits, and confidentiality statement. These materials were deemed useful resources by enumerators that could help them convince reluctant or suspicious respondents to participate.

4. *On-the-fly translation and use of interpreters.* In all of the field studies the research teams examined how bilingual enumerators translated census questions on-the-fly and how monolingual English enumerators recruited or used someone to interpret the census questions for speakers of target languages. More specifically they sought to identify the strategies used to translate on-the-fly; examined whether on-the-fly translations were complete and accurate; and noted issues that arose from the recruitment and use of interpreters in the Nonresponse Followup interview.

Findings: This study shows that due to the lack of adequate in-language materials, enumerators relied mainly on two approaches in their interaction with non-English speaking households: (1) translating on-the-fly; or (2) having an ad hoc interpreter mediate the interview. The current practice of on-the-fly translation and the use of ad hoc interpreters posed a potential threat to data quality despite the fact that these approaches enabled enumerators to complete Nonresponse Followup interviews. Issues observed include: (1) inaccurate and incomplete translation of census questions; (2) modifying census questions or skipping some questions completely; (3) having someone, especially a child, to act as an ad hoc interpreter created some communication problems or cognitive and emotional burden on the under-age interpreter.

5. Perceptions of and Reactions to the 2010 Census. A last set of research questions that were added to the study after its initial conceptualization involved exploring how non-English speaking respondents perceived and reacted to the 2010 Census Integrated Communication Program and how they handled the mailed census form.

It is important to note that in focusing on the Nonresponse Followup interview the primary observations undertaken in the current field studies were not designed to observe the impact of the 2010 Census Integrated Communication Program per se. The only data collected that speaks to this set of questions is from the debriefing and focus-group interviews as well as the insights provided by the ethnographers based on their long-term experience conducting research in these communities. Therefore the data drawn upon to speak to this set of questions is based primarily on respondent self-reporting that is largely retrospective. In this sense the research on this question is mostly exploratory and the findings should be read quite tentatively.

Findings: With the aforementioned caveat in mind, the debriefing data collected by the research teams indicated that Limited English Proficiency populations all had some level of awareness of the 2010 Census as a result of the advertisements by the 2010 Census Integrated Communication Program. However, there are some indications that general awareness did not necessarily translate into a complete understanding of what the census procedures involved. Several factors appeared to lead to a gap between census awareness and action: (1) incomplete understanding. Thus although non-English speaking respondents in the seven communities of language had a general awareness of the 2010 Census, they reported that they did not fully understand what they were supposed to do with the form (i.e., they needed to fill out the form and mail it back); (2) in some cases non-English speaking respondents were aware of the census and understood its message but still harbored significant doubts about how it would be used and remained concerned that participation might be prejudicial to them in some way. The types of concerns that arose with this reluctance often involved issues that were specific to each community; (3) finally, in at least one language community individuals appeared to pay little attention to the census communication and were uninterested in participation because they saw it as an exercise for the American community, which they, as temporary sojourners, did not see themselves as a part of. Successful Census Bureau communication with all these communities is likely to require measures that more fully identify these specific concerns and devising messages that address them.

Based on findings from this research, recommendations are proposed on: (1) broad and general strategies for planning and designing the 2020 Census that can target all significant groups of populations with limited English proficiency; and (2) specific recommendations in the aforementioned areas that can and should be integrated into the broader overall strategic planning process, as outlined below.

Recommendations

I. Primary Recommendation: Developing a strategy and program for 2020 Census coverage of Limited English Proficiency populations

1. Taking inventory of these populations
2. Developing and testing within each selected community of language the following:
   - translation materials;
   - bilingual interviewer recruitment standards, procedures, and strategies;

- specialized Nonresponse Followup training for interviewers and site managers who will be enumerating these populations;
- procedural protocols for the referral of Limited English Proficiency households to bilingual interviewers;
- community messaging strategies;
- quality assurance monitoring research that can verify the effectiveness of these measures during the 2020 Census itself.

In our view, many of these activities could be developed in conjunction with and as a part of existing partnership development programs.

II. Specific Recommendations

Set 1. Expand and add to the Partnership Program with Limited English Proficiency Community Organizations

1.1 Develop an understanding of the range of organizations and their respective roles in disseminating and legitimizing different kinds of information to different segments of each respective Limited English Proficiency community. This could be accomplished through a combination of additional research and consultations organized through the partnership programs that already exist.

1.2 Specific issues that might be addressed would include:
- identifying the most effective channels within that community;
- engaging the Partnership Program for developing and testing Limited English Proficiency-community-targeted message content;
- utilizing the Partnership Program for testing Limited English Proficiency-community specific interview protocols, translated questionnaires, and additional language assistance materials.

Set 2. Develop effective in-language materials for all major Limited English Proficiency populations

2.1 Translate census enumeration questionnaire in major target languages (e.g., Spanish, Chinese, Korean, Vietnamese, Russian, and Arabic).
2.2 Translate informational materials, including confidentiality statement and notice of visits.
2.3 Provide printed copies of in-language census information instead of online only.
2.4 Pretest all translations with speakers of the pertinent target languages.

Set 3. Nonresponse Followup instrument, process, and protocol

3.1 Translation of Nonresponse Followup Instrument.
3.2 Automation of Nonresponse Followup instrument to allow enumerators to toggle between the English and in-language instrument.
3.3 Optimizing questionnaire design for Limited English Proficiency populations .

3.4 Explore effective ways to harness new technologies in order to communicate with illiterate Limited English Proficiency respondents during the Nonresponse Followup interview.

Set 4. Enumerator Recruitment, Training, and Support Systems

4.1 Recruit bilingual enumerators familiar with the population and with cross-cultural communicative competence.
4.2 Develop assessment tools/procedures to verify bilingual enumerators' language ability and cross-cultural communicative competence.
4.3 Hire interpreters that are fully bilingual (can read and write in target languages).
4.4 Develop and provide enumerator training on cultural sensitivity/in community of language specific protocols.
4.5 Provide enumerators with more hands-on training that focuses on in-the-field practice and real-life Limited English Proficiency scenarios.
4.6 Develop and provide Limited English Proficiency-community tailored training on how to convey the confidentiality message.
4.7 Develop guidelines and provide enumerators training that specifically address the challenges posed by using children as interpreters.
4.8 Develop and provide adequate training for field supervisors on handling Limited English Proficiency cases.

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1 INTRODUCTION

As part of the 2010 Census Program for Evaluations and Experiments, a set of ethnographic studies were conducted during the 2010 Census to observe Nonresponse Followup (NRFU) interviews with households that spoke a language other than English in areas with heavy concentrations of populations with Limited English Proficiency (LEP). A multilingual research team consisting of seven sub-teams, each proficient in one of the seven languages focused on in this study (Arabic, Chinese, Korean, Portuguese, Russian, Spanish, and Vietnamese), was commissioned to carry out the research in the 2010 Census.

The objectives of this research were to collect extensive qualitative data that could provide an empirical basis for beginning to: (1) identify which linguistic and sociocultural factors appear to affect the enumeration of non-English speaking populations during the NRFU interview process; (2) examine the measures that were taken by enumerators to negotiate access to non-English speaking households and to collect the required census data from these households; (3) observe if and how in-language census materials were used in the field; and (4) gain additional insight into how non-English speaking populations perceived and reacted to the census and its public messaging. Findings from this study will help develop recommendations for the 2020 Census planning process, by identifying issues that should be addressed in order to improve the enumeration process in that subset of the population that has limited, or entirely lacks, English proficiency. Most specifically, the findings in this report may be potentially relevant to further refining the procedures and approaches used to translate of census questions; to the re-design of questionnaires and interview protocols for non-English speaking respondents; to developing policies for the use of interpreters in enumeration interviews; and to the development of interviewer training.

While this study is based on first-hand observations of over 500 NRFU interviews undertaken during the 2010 Census operations, it is important to underscore that the population we observed was not selected through random sampling procedures. In this sense the study is necessarily exploratory and our findings should be read as tentative and suggestive of further areas for research rather than generalized -- either at the level of the individual communities-of-language, or in terms of non-English speaking populations in the U.S. as a whole.

2 BACKGROUND

In 2010, the Census Bureau undertook the decennial census to enumerate the U.S. population, with a mission of counting everyone once, only once, and in the right place. Accurate enumeration of non-English speaking households in decennial censuses has presented a significant challenge to the Census Bureau. In an effort to better meet this challenge, the Census Bureau developed a comprehensive language assistance program for the 2010 Census which aimed to encourage speakers of other languages to participate. The Language Assistance Program provided the 2010 Census fulfillment form in the five primary non-English languages

(Spanish, Chinese, Korean, Russian, and Vietnamese),[1] a census advance letter and reminder card with a statement about language assistance in multiple languages, a Be Counted form in these five languages, language assistance guides in 59 languages, and telephone questionnaire assistance in the five primary non-English languages (Kim and Zapata, 2012).

Despite these important efforts, the Census Bureau has generally lacked a firm or comprehensive empirical understanding of how census data collected from non-English speaking households in face-to-face interviews is affected by the challenge of communicating across linguistic barriers that tend to correlate with socio-cultural differences. Previous studies show that Spanish-, and other non-English language households are less likely to respond to a survey in the mail mode and more likely to respond in interviewer administered modes (e.g., Treat and Stackhouse, 2000; Martin and Gerber, 2006; Pan, 2007; Bates and Pan, 2009). It seems prudent for the Census Bureau to be prepared for the need to collect census data from many of these households through face-to-face interviews. It is, therefore, particularly important to identify what, if any, factors affect the validity of the data collected from non-English speaking households through the NRFU interview process.

For the reader who might not be familiar with U.S. census operations, we provide the following brief overview. The 2010 Census is an address-based operation. A census form was mailed out to every housing unit with a valid mailing address throughout the nation in April 2010. Residents of housing units were expected to fill out the census forms and mail them back.[2] When no census form was returned from an address, the 2010 Census attempted to collect this missing data through its field operation: NRFU interviews. "NRFU operation was the largest field operation in the 2010 Census, designed to enumerate households in mailback areas who did not return a census questionnaire by mail or complete an interview by telephone by the time the NRFU universe was determined in the second week of April." (Walker et al. 2012). During the NRFU operation, a census enumerator visited households that had failed to return their census forms, and sought to collect their data through a personal interview.[3] The enumerators visited each housing unit in the NRFU universe to determine its Census Day (April 1, 2010) status and to ask residents for data to complete the enumerator questionnaire. The current study focused specifically on NRFU interviews conducted during the 2010 Census among non-English speaking households.

Previous research on hard-to-count populations (which include non-English speaking households) has focused primarily on issues associated with undercounting, such as residence rule issues (e.g., Gerber, 1994; Martin, 2007); mobility (de la Puente, Hunter, and Salo, 2003); complex household structure (e.g., de la Puente, 1993; Schwede, 2003; and Schwede, Blumberg, and

[1] The 2010 English-Spanish bilingual census form was mailed to targeted areas. The 2010 Census fulfillment form in the other four languages is available to respondents who request one by calling the Telephone Questionnaire Assistance Center. The criterion listed in footnote 1 was used for the English/Spanish bilingual universe selection, not traditional Census Bureau LI criteria.

[2] The final 2010 Census mail participation rate was 74 percent (http://2010.census.gov/2010census/take10map/). [3] 2010 NRFU interviews ranged between 7 and 30 minutes per household, depending upon household size. The 2010 NRFU questionnaire can be seen in Appendix D.

[3] 2010 NRFU interviews ranged between 7 and 30 minutes per household, depending upon household size. The 2010 NRFU questionnaire can be seen in Appendix D.

Chan, 2006); and colonias (de la Puente and Stemper, 2003). More recently, additional Census Bureau research efforts have been devoted to language-related research on a broader set of questions about the data collection process, including translation challenges (Pan and de la Puente, 2005, Pan and Fond, 2011), pretesting translated instruments (Childs and Goerman, 2010; Goerman and Caspar, 2010), use of interpreters in survey interviews (Pan, 2006), cross-cultural communication norms and survey interviews (Pan, 2008; Chan and Pan, 2011), and developing and translating key messages that aim to motivate census and survey participation from non-English speaking populations (Pan and Landreth, 2009; Bates and Pan, 2009).

Despite the important contributions of the aforementioned studies, no empirical research prior to this study has focused in a systematic way on the process of census data collection from non-English speaking households through face-to-face interviews. This study thus represents a significant first step in filling this research gap through an empirical approach that involved field studies that were designed to address the same research questions and to collect comparable data from seven different communities of language[4] (Arabic, Chinese, Korean, Portuguese, Russian, Spanish, and Vietnamese). In each community of language observations of NRFU interviews and subsequent debriefing interviews were conducted with a select number of monolingual English-speaking respondents in order to provide a basis for comparison that could be used to highlight the most noticeable differences in the behavior of LEP populations. Altogether, a total of 586 NRFU interviews were observed. These data were generated through the development and deployment of ethnographically-informed observational protocols and subsequent de-briefing and focus-group interviews. Both the data collected and the rationale for this methodological approach is described in greater detail in the Methodology section below.

This report summarizes the main findings from these seven field studies observing NRFU interviews with speakers of seven languages and proposes recommendations to address challenges identified through this research.

2.1 Theoretical approach

In this study, the problem of enumerating non-English speaking respondents through NRFU interviews is approached from a theoretical perspective that highlights the fact that every face-to-face encounter between a census enumerator and a non-English speaking respondent is simultaneously a linguistically-mediated communicative event as well as a form of culturally-mediated social interaction (Briggs, 1986; Gumperz, 1982; Hymes, 1972; Tannen, 1993; Schaeffer, 1991; Suchman and Jordan, 1990, 1992; Schegloff, 2002).

[4] A more conventional technical term that is used in sociolinguistics and anthropological linguistics to refer to a community of speakers that share language and a certain number of communicative conventions is "speech community" (Hymes, 1972). In this study the term "community of language" is deployed to refer to the broadest form of "speech community" examined in this study: namely one comprised of people who share reference to a recognized language that may have standardized variants which share significant overlap. Differentiation at this level is necessary for this research and analysis in order to distinguish among the seven primary groups in this study, and the term "community of language" is meant analytically to signal difference at this level. The term "speech community" refers to several forms of far more specific sub-groups within many of these communities of language, distinguished from each other in by significant variations in dialect (e.g., Azorean, Continental, Brazilian and Criolo/Cape Verdean, Heritage dialects in the Portuguese case).

Any social interaction, including what we term here a "census interview encounter" (CIE), is always carried out between or among multiple actors, each of whom brings their own definitions, interests, and expectations to bear in ways that shape the course of interactional dynamics and ultimate outcomes. These outcomes include how the interaction situation itself (i.e., the interview) is defined and how information within it is conveyed and understood. Each actor's perspectives, and their effects on interaction (and the information transmission process therein), must thus be empirically investigated rather than presumed.

Thus for example, from the perspective of the Census Bureau the purpose of the NRFU interview is quite clearly and narrowly defined: namely, to solicit and obtain from respondents accurate information about a limited set of variables that have been pre-defined in very specific ways. The Census Bureau has developed a standardized set of questions and interview protocol and mounted major public information campaigns, all in an effort to: (1) ensure that respondents accept this definition of what the NRFU survey encounter is all about as the basis for their own participation in it; and (2) ensure that questions are understood in the relatively restricted way that corresponds tightly to the information the Census Bureau hopes to obtain through the interview.

The approach taken in this study does not presume, quite purposively, that either of these objectives was achieved. Rather it seeks to explore the extent to which that may or may not be the case in interview situations in which the primary language of NRFU respondents is a language other than English. More specifically, this study investigates how linguistic code, social definition of the situation, communicative conventions, and social role and identity negotiation affect the NRFU interview process with speakers of languages other than English.

Language as Code: Language itself -- and more specifically, linguistic difference -- is the first and most obvious factor that can mediate interactional outcomes in the CIE. The findings in this study highlight how linguistic codes themselves appear to affect the NRFU process and its outcomes in several respects. These included: (1) the degree of conceptual equivalence between terms in other languages and English terms used in the census questionnaire; (2) the degree of interviewer fluency in the primary language of interviewees who spoke little or no English; (3) the fluency (both in English and in the other language) of translators and the quality of their translations; and (4) the utilization of language materials provided by the Census Bureau.

However, approaching the interview as a form of culturally-mediated social interaction provides a theoretical framework for assessing a broader range of factors that affect the communication process, beyond differences in linguistic code alone. This study thus investigates more than just the question of linguistic accuracy in translation and conveyance (i.e., whether communicative failures stem from inaccurate terminological deployment, lack of enumerator fluency or translator availability, or an actual lack of conceptual equivalency for certain English-language terms in other languages). Linguistic difference in this narrow sense provides merely the initial point of entry for investigating another range of factors that often correlate with, but are not reducible to, linguistic codes -- and yet all of which have been well established by sociolinguistic research and theory to play an indispensable role in mediating all interpersonal

communication processes and social interactions. They are thus likely to be important in mediating the CIE and its outcomes. Most notably these additional factors include: (1) socially prescribed "definitions of the situation" (Goffman, 1967; 1974); (2) culturally-specific "meta-communicative conventions" (Briggs, 1986); and (3) the negotiation of culturally-specified social roles and identities (Schieffelin and Ochs, 1986; Silberstein, 1988; Eastman and Reese, 1981; Maltz and Borker, 1982; Gumperz, 1982; Tannen, 1993; Brenner, 1982; Maynard, 2002; Houtkoop-Steenstra, 2000).

Definition of the Situation: Prior research on linguistic minorities' survey participation (Pan et al., 2005; Pan et al., 2009; Pan and Landreth, 2009; Chan and Pan, 2011; Lubkemann, 2004) dovetails with broader findings in the literature (Briggs, 1986; Maynard 1988; Houtkoop-Steenstra, 2000; Harkness, 2003; Braun, 2003; Couper and de Leeuw, 2003; Schwarz, 2003; Van de Vijver, 2003). These studies demonstrate that linguistic minorities often differ significantly from mainstream populations in terms of how they define surveys and other forms of social encounters that focus narrowly on the act of information solicitation, and consequently craft their own participation in them. This is especially so to the extent that their lack of fluency in English stems from the fact that they are immigrants who have undergone only partial re-socialization in the U.S. Consequently, their understanding of and their conduct in a CIE, especially one that is conducted by a government agency, may be mediated by forms of fear and distrust based upon experiences with governments in their countries of origin and/or their concerns with their legal status in the U.S. Definitions of the situation may also be affected by other differences in socialization or past experience that sometimes include a lack of familiarity with surveys, often involve culturally-specific understandings about interactions with strangers, and or even by prior experience with census practices in their countries of origin.

Meta-communicative Conventions: In this study, the NRFU survey encounter is examined as a "communicative event" (Hymes, 1972) in which the transmission, comprehension, interpretation, and meanings of verbally-conveyed information are profoundly affected by culturally-informed social conventions that differ significantly across -- and sometimes even within -- different communities of language. These "meta-communicative conventions" (Briggs, 1986) play a vital role in providing linguistic signs with the context that enables them to convey specific meanings. These conventions may also convey meaning, and thus communicate, in their own right. Such conventions encompass implicitly understood rules about how to ask for and provide information, understandings of how verbal and non-verbal inflections signal different interpretations of verbally conveyed information, and culturally-specific understandings about what the purpose of specific genres of conversation may be. All of these are crucial to understanding what meanings are in fact being signified in any instance of verbal communication.

Social Role and Identity Negotiation: Finally, the approach to the interview as a social encounter takes it as axiomatic that the communication of information is only one of several social tasks that actors attend to in the CIE. It is therefore also necessary to investigate if and how a variety of dimensions of social relationality are being negotiated in the CIE, and more to the point, how and if these negotiations impinge upon and affect interaction and the communication process therein (Briggs, 1986; Tannen, 1993). It is suggested that these factors are all the more important to investigate among non-English speakers because, as immigrants, most of these respondents

come from contexts in which social roles and identities (including age, generation, race, ethnicity, and sex) are likely to be culturally defined and linguistically cued in ways that differ significantly from the American mainstream.

This study investigates how each of these four factors (narrowly construed linguistic code; social definition of the situation; communicative conventions; and social role and identity negotiation) and their interactions affected the NRFU interview process and its data outcomes in terms of the following research questions.

2.2 Research areas and questions

In this investigation of challenges in enumerating hard-to-count non-English speaking populations, the following five sets of research questions were addressed.

1. *Enumerator Strategies for gaining and maintaining access to non-English speaking respondents*. This set includes an examination of how non-English speaking respondents understood and defined the enumeration encounter as a form of social interaction in ways which predisposed them to participate (or not) in particular ways; how enumerators interacted with these respondents; what linguistic and cultural strategies enumerators sought to employ in order to secure and maintain access to respondents, and to obtain success with respect to the census form's informational objectives; how the literacy level of both the enumerator and the respondent affected the interview process; and what conversation strategies the enumerators employed to communicate with non-English speaking respondents.

2. *Conceptual equivalency of census questions across and within communities of language*. Although relatively specific, conceptual equivalency issues contributed in particularly significant ways to the communicative challenges confronted in NRFU interviews with non-English speakers. They thus warrant the focused comparative treatment provided in this study. The examination of these issues thus includes how linguistic codes and communicative conventions as well as other socio-culturally shaped understandings affected how respondents understood and responded to particular census questions as well as how enumerators responded to the challenge of obtaining the information sought by the census under these circumstances.

3. *Use of in-language materials to facilitate data collection from non-English speaking populations*. The in-language materials include the Census Bureau language assistance guides, Spanish Job Aid, Language ID Flashcards, and translations of the census questionnaire in multiple languages. Consequently, questions about their use and effect cross-cut and inform other primary questions. Thus while the use of these materials is addressed throughout the analysis of those questions, this issue was addressed as a question in its own right largely in order to inform the language-material development program in a more integrated and cohesive manner. Thus, these materials were investigated in terms of how they were actually used in the field, how effective in-language tool kit (Job Aid, Language ID flashcard, language assistance guides) proved to be in the NRFU interviews, and what additional tools were needed to help enumerators to complete the task of the NRFU interview.

4. *On-the-fly translation and use of interpreters*. Interviewing non-English speaking populations inevitably involves on-the-fly translation or using interpreters, which poses a potential threat to data quality and standardized interviews. Thus, the analysis focused specifically on how bilingual enumerators translated census questions on-the-fly and how monolingual English enumerators recruited or used someone to interpret the census questions for speakers of target languages. This examination includes what strategies were used to translate on-the-fly, whether on-the-fly translations were complete and accurate, and what issues were noted regarding the use of interpreters in the NRFU interview.

5. *Non-English speaking respondents' perceptions of and reactions to the 2010 Census Integrated Communication Program.*[5] This includes how non-English speaking respondents perceived and reacted to the 2010 Census Integrated Communication Program and how they handled the mailed census form. While linguistic difference was examined and found to be a mediating factor, others were equally relevant. These included their views of the government itself, a variety of issues related to their own status as immigrants, prior experiences in their countries of respective origin with comparable surveying exercises as well as experiences with authority more generally, and in some cases issues of identity politics specific to particular communities of language. Understanding how these factors interacted to affect the effectiveness of the 2010 Census Integrated Communication Program not only has bearing on how future campaigns can be improved but provides necessary context for understanding many of the challenges that arose in the NRFU interviews with non-English speaking respondents.

3 METHODOLOGY

3.1 Study design

This study comparatively analyzes data collected in seven distinct communities of language through methods of ethnographically-informed[6] direct observation.

[5] This set of research questions was added at the request of another 2010 Census Evaluation Project: National Opinion Research Center (NORC) survey which evaluated the 2010 Census Integrated Communications Campaign and Partnership Program. A subset of the survey questions were added to this study's debriefing protocol to obtain information on non-English speaking respondents' exposure to paid advertising, earned media and partnership activities of the 2010 Census.

[6] "Ethnography" is a term that is usually applied to describe methods for obtaining an understanding of social behavior through a combination of systematic open-ended interviews, as well as participation in the course of everyday activities in the natural context of their occurrence. Ethnographic understanding is developed through a researcher's personal long-term immersion and multi-faceted social interaction with, and direct observations of, subjects in a particular socio-cultural milieu. (Briggs, 1986; Agar, 1996; Hammersley, 1992). The most apt analogy for what ethnography seeks to accomplish may be to that of learning another language, itself an activity that relies on extensive practice in a natural social context. The "quantitative imperatives" in ethnographic approaches are thus temporal (the extent of time) and of experiential diversification (the extent to which a concept's deployment is observed in a variety of different contexts of practice). Indeed to the extent that communication is always a key component of social interaction, the effectiveness of ethnography in producing knowledge about any given question is likely to be correlated (all else holding equal) to the extent of the following in combination: (1) that researcher's

The primary data in this study were collected through the direct observation of 586 live NRFU interviews by seven ethnographer teams. Strictly speaking, the brevity of their direct observations of NRFU interviews -- even when coupled with the debriefing interviews that followed -- would not suffice by itself to qualify this study's methodology as rigorously ethnographic, if only because of the brevity of the interaction between researchers and research subjects. Rather, what allows these studies to reach that methodological bar is the fact that in all of these cases the ethnographer teams were comprised of individuals whose previous long-term socially-immersive research had already provided them with linguistic fluency and knowledge of communicative and social conventions specific to the communities of language whose NRFU interviews they were observing. It is this prior ethnographic immersion that both equipped them with the knowledge that provided them with the contextual knowledge needed to interpret the communicative events and understand the social interactions in the CIEs that they observed. They were able to draw upon this previously acquired knowledge and understanding in the observation of the NRFU interviews, and to make the most they could of the admittedly short debriefing interviews conducted with both the respondents and the enumerators. In short while the observations and interviews conducted in this study would not by themselves be sufficient to allow our field studies to qualify as ethnographic, these research activities built upon and directly benefitted from the much longer and sustained ethnographic engagements in these communities of the specific ethnographers who conducted the studies. It is in this sense -- and not merely in the use of ethnographic techniques – that this study is described as "ethnographically-informed."

Thus the cultural specificity of the each ethnographic team's knowledge provided the indispensable tools for a far more accurate understanding and interpretation of the CIE as a social encounter and communicative event. In addition, the Census Bureau Coordinating Research Team for this project developed a common inquiry frame that identified common questions, issues and processes to be investigated, and a shared protocol (that consisted of a common set of questions to be addressed through the live observation of the NRFU interview and the subsequent debriefing interview) (see Appendices A, B, and C). This common inquiry frame ensured that observations and debriefing interviews were conducted in a systematic manner that would later be amenable drawing comparisons amongst the individual field studies and across the different communities of language.

3.2 Selection of languages

There were two tiers of languages covered in this study, consisting of the seven primary non-English languages spoken in the U.S. based on the 2010 Census Language Program selection criteria (Kim and Zapata, 2012) and the 2007 American Community Survey data.

1. Tier One languages selected for this research consisted of Spanish, Chinese, Korean, Russian, and Vietnamese. These are the five most spoken languages other than English in the U.S. based on the language selection criteria from the 2010 Census Language Program and American Community Survey data. For each of these five primary languages, a standard

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linguistic fluency and competency in a community of language's communicative conventions; and (2) that researcher's knowledge of and experience with cultural norms for social interaction.

translation of the 2010 Census questionnaire was created for the 2010 Census operations and should have been available for enumerators to use.[7] The translations of the 2010 Census questions in these five languages were all cognitively tested to ensure translation quality and cultural appropriateness in the expression (Pan et al., 2009).

2. Two additional Tier Two languages were included in this study (Arabic and Portuguese). There were language assistance guides available for the 2010 Census in these two languages, but the translations were not cognitively tested. Based on the 2007 ACS data, these two languages are the next most spoken languages other than the five primary languages in Tier One, and they are in the Tier Two category for the 2010 Census Language Program (see Kim and Zapata, 2012). Among the Tier Two languages Arabic and Portuguese present interesting intra-linguistic variations (e.g., different varieties of Arabic, and Brazilian Portuguese compared with European Portuguese). Dialectical variation is a significant consideration not only in these languages but also in what is by far and away the largest LEP community: Spanish speakers. Studies that examine this problem may also prove potentially relevant to understanding dialectical variants among English-speakers (including growing numbers of Caribbean, West African, and Indian immigrants). Including Portuguese and Arabic thus also provided a broader base from which to investigate a problem (how intra-linguistic variations play out in the census interview, e.g., standard language compared with dialect) that has broader practical implications for Census Bureau translation and interviewer training efforts.

Together these two tiers of languages provide solid grounds for observing efficacy of standard translations in Tier One languages which were improved through the cognitive testing process versus those that were not cognitively tested in Tier Two languages. Since the NRFU questionnaire was not available in the target languages, it was expected that the translated 2010 Census questionnaires and language assistance guides would be made available for NRFU bilingual interviewers to use in the field or as a study tool. The research plan was to gather information from NRFU interviewers on their perspective of the usefulness of the translations, and see if they tended to translate on-the-fly or to use some of terms in the standard translations to convey the key census concepts, including race and ethnicity.

3.3 Research teams

The research teams consisted of two sets of researchers: (1) a Census Bureau Coordinating Research Team comprised of an in-house sociolinguist and anthropologist (aided by several graduate student assistants); and (2) a set of seven multilingual research teams (one for each community of language), each headed up by a contracted bilingual senior ethnographer who was assisted by two to four assistant ethnographers. Our ethnographers were drawn from several different disciplines, including anthropology, sociology, and sociolinguistics.

[7] The standard translation of the 2010 Census form is a mailout/mailback self-administered census form, which is different from the NRFU form in terms of form navigation or wording of some questions. However, the key Census questions and key Census concepts are present in both the self-administered census form and the NRFU form. Therefore the current study uses the standard translation of the 2010 Census form as a yardstick to gauge the translation and interpretation problems in the field.

The Census Bureau Coordinating Research Team developed the initial study design, research methodology, observation guide, debriefing protocol, and training guidelines for contract ethnographers (who in turn later provided additional input into the study and protocol design). The Census Bureau Coordinating Research Team also conducted research to identify potential candidates that could serve as the principal researchers and team leaders (the senior ethnographers) for the seven ethnographic/language teams. In addition, the Census Bureau coordinating team developed and conducted training for those ethnographers, and coordinated field observation and data collection as well as the transcription process. Following the data collection, the Census Bureau Coordinating Research Team developed a comparative analysis framework, provided analytical feedback and guidance for each of the seven case studies, and led in the synthetic comparative analysis that produced the findings in this report.

The seven multilingual field research teams were comprised of bilingual (English and target language-speaking) ethnographers. The principal researchers that led each of the seven teams as their respective senior ethnographers were selected based on the following criteria: (1) established record of research in one of the related fields (sociology, anthropology, or sociolinguistics); (2) excellent research skills in conducting observational and ethnographic study as evidenced in their record of peer-reviewed publications and external research grant records; (3) linguistic fluency and cultural knowledge of the speech community under investigation; and (4) access to and established connections with their respective communities of language. Once the principal researcher/senior ethnographer was identified for each language, he or she was responsible for assembling a team of three to four bilingual assistant ethnographic researchers. These selections were reviewed and approved by the principal investigator of the Census Bureau Coordinating Research Team. The Chinese and Arabic teams had four members, while the rest of the teams had three members each. In total 23 field researchers contributed to this field study.

All of these team members underwent a two-day training session at the Census Bureau Headquarters prior to commencing fieldwork. The training included the following topics:

- Overview of the 2010 Census Language Program
- Overview of the NRFU interviews
- Research objectives of the observational study
- Title 13 training and handling data security issues
- Overview of field observation guidelines and procedures
- Census questions and translation of census questions
- Observation protocol and debriefing question review and refinement
- Observation coding scheme and analysis
- Report writing
- Timeframe and schedule

The training provided all team members with an understanding of the procedures and expectations for the study and sought to ensure that the observations could be conducted in a systematic manner that would prove amenable to cross-case comparison.

3.4 Research sites

Three considerations factored into the site selection process: target population location, qualified ethnographer availability, and cost. Geographic areas that had high concentrations of speakers of the seven target languages were selected as the research sites based the 2007 American Community Survey data. Also considered was the availability of ethnographers who were located in these areas and who had the bilingual ability and cultural knowledge of the targeted communities of language.

During the process, nine states were selected as the research sites: California, Illinois, Ohio, Michigan, Massachusetts, Rhode Island, Maryland, New York, and Virginia. Some language teams conducted the observation in one state, but some teams covered more than one state in order to observe the target number of in-language interviews.

Table 1. Language teams and research sites

Language teams	**Research sites**
Arabic	Michigan
Chinese	Maryland, New York, and Virginia
Korean	Maryland, New York, and Virginia
Portuguese	Massachusetts, Rhode Island
Russian	Ohio, New York
Spanish	Illinois
Vietnamese	California

After the sites were selected, the Center for Survey Measurement (CSM)[8] worked with the Census Bureau Field Division, the Regional Census Centers (RCCs), and the Local Census Offices (LCOs) in the specific areas to coordinate the observation and to make necessary arrangements for bilingual ethnographers to accompany enumerators in the target areas. After the initial arrangement was made with the RCC at a research site, the team lead of each research team contacted the RCC and was given the contact information of one or two LCOs of a given research site. The team lead then worked with LCOs to schedule observations for all his/her other team members. Each individual ethnographer was then teamed up with an enumerator for a particular day so the ethnographer could follow the enumerator and observe NRFU interviews.

3.5 Steps and focus of the observation

To ensure comparability between language teams, a shared observation protocol was established, debriefing questions, and specific steps for the teams to follow in the research.

3.5.1 Steps for observation

[8] CSM was a subgroup of the Statistical Research Division (SRD) when the research was initiated.

The following steps were followed by all seven teams in their fieldwork:

1. Over a two week period, each ethnographer accompanied one enumerator throughout any given day and observed the NRFU interviews that that the enumerator conducted. Each ethnographer observed no fewer than three different enumerators over the course of the two-week study time. Although it ultimately did not prove possible to do so in all cases, the teams were instructed to try to observe both enumerators who shared the language of non-English speaking respondents as well as monolingual English speaking enumerators both in their interactions with non-English speaking respondents and with respondents from the respective target language.

2. Ethnographers obtained consent for audio-taping interviews from respondents, following the guidelines specified by the Census Bureau. If respondents did not agree to be audio-taped, ethnographers took detailed notes of the interview.

3. English interviews were included in the observation as a baseline for comparison to determine if issues with comprehension of census questions or with interviewing interaction identified in non-English speaking households were also present in English-speaking households. Given that the primary focus is on households with limited English proficiency, in this (already lengthy) report the English-speaking comparison group is not discussed in any detail in this report. Instead they provide an implicit baseline (or in more technical sociolinguistic terms an "unmarked" category) against which to highlight the contrastive communicative and interactional (or "marked") behavior observed in other communities of language. This comparison is treated more explicitly in the individual team reports -- the level at which such comparisons actually served to highlight noteworthy differences for analytical treatment.[9]

4. Immediately following their observation of the NRFU interview, each ethnographer conducted a post-enumeration debriefing with the respondent whose NRFU interview they had just observed. These were conducted on an individual basis (apart from the enumerator) and sought to understand the respondent's experience of being interviewed, their knowledge and awareness of the U.S. Census, and their experience with surveys and censuses in their country of birth. While a common base set of questions was addressed in all of the interviews regardless of the community of language, ethnographers were also given latitude to discuss and explore additional issues of relevance to the study if and as these arose in the course of the debriefing.

Each ethnographer also conducted at least one post-enumeration debriefing with the enumerators that they observed. In addition to the debriefings that were conducted on an individual basis, several of the field teams conducted focus group interviews with groups of enumerators. These interviews solicited enumerator perspectives about the communicative and other challenges in

[9] These individual reports can be consulted at the Center for Survey Measurement Research Report series website. For details concerning findings from each language team, see Ajrouch, Pan and Lubkemann (2012) for Arabic findings; Shepherd, Pan and Lubkemann (2012) for Chinese findings; Yoon, Pan and Lubkemann (2012) for Korean findings; Rodrigues, Pan and Lubkemann (2012) for Portuguese findings; Isurin, Pan and Lubkemann (2012) for Russian findings; and Isabelli, Pan and Lubkemann (2012) for Spanish findings. See http://www.census.gov/srd/www/byname.html).

the NRFU interviewing process and the strategies they developed to address these issues (as described in greater detail below).

3.5.2 Protocol descriptions: Observation and debriefing protocols

The Census Bureau Coordinating Research Team housed in CSM developed a standardized observation protocol, general debriefing questions, and a system for coding verbal and nonverbal behaviors (see Appendix A, B, and C) to guide the research teams in the study. The observation protocol and debriefing questions were translated by the research teams from English into their respective target languages, using a committee approach in conducting the translation [10] as recommended by the Census Bureau Translation Guidelines (Pan and de la Puente, 2005).

Together the observation and debriefings aimed to generate a better understanding of five factors that could impede census data collection among LEPs, namely: linguistic competence (i.e., enumerator fluency in the language of monolingual respondents), the literacy level of respondents, cultural norms specific to communication, cultural norms about broader social interaction, and social experience (especially with survey and census participation, but also with government authority etc.) both (currently) the U.S. as well as (previously) in societies of immigrant origin.

3.5.2.1 Observation protocol

The observation protocol was detailed enough to record key issues under study, including the observed linguistic competence of both the enumerator and of the respondent and the household[11] (in both the target language and in English), respondents' literacy level in their home language and English. The observation protocol also included a checklist to record which questions on the census enumeration questionnaire caused confusion (e.g., the race question). In their observations of the NRFU interview the ethnographers documented both verbal and non-verbal communication. Verbal communication was documented in audiotape recordings, while non-verbal communication was recorded in the detailed notes by the ethnographers. Their subsequent analysis took into consideration both of these aspects of communication.

3.5.2.2 Respondent debriefing protocol

Post-enumeration debriefings of respondents focused on the interview process rather than on collecting census data. More specifically they focused on identifying respondent perceptions of the enumeration interview as both a social situation and a communicative event. These

[10] A committee approach is one in which a team of three language experts worked independently, each translating one third of the document. 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 and flowed well in the target language (Schoua-Glusberg, 1992).

[11] The ethnographer observed the respondent (the primary member of the household interacting with the enumerator) as well as other members of the household present. The ethnographer also gathered data about the household from the respondent when possible. Each encounter presented a unique situation, and the observations were designed to investigate this diversity.

debriefings were conducted on an individual basis at the completion of a NRFU interview, and were conducted in the respondents' native language by ethnographic researchers already familiar with the community in question and with full linguistic competence. Also included was a subset of questions from a National Opinion Research Center (NORC) survey[12] that evaluated the 2010 Census Integrated Communications Program and Partnership Program in the debriefing protocol to obtain information on non-English speaking respondents' exposure to paid advertising, earned media, and partnership activities of the 2010 Census.

3.5.2.3 Enumerator debriefing protocol

The enumerator debriefing interviews focused in particular on soliciting information about the communicative and broader interactional challenges (including gaining access) that enumerator's confronted in the NRFU data collection process, on the strategies enumerator's developed to handle these challenges, and on the rationale for those strategies. While ethnographers often used the observations they had made to prompt these discussions they also encouraged enumerators to reflect more broadly on their interviewing experiences (including behavior the ethnographers did not observe).

In addition to the debriefings that were conducted individually, in two of the field studies enumerators were also interviewed in focus groups. These debriefings provided grounds for: (1) further discussion of the role of linguistic competence in the interview (2) identifying and further exploring enumerator perspectives about the main challenges of data collection from non-English speaking households; and (3) discussing enumerators' interpreter recruitment and use strategies.[13]

The research teams were given the flexibility to expand the debriefing questions based on their knowledge of the community under study to make the debriefing questions more relevant to respondents and enumerators of the target language.

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[12] The survey is part of the 2010 Census Integrated Communications Program Evaluation (2010 CICPE) conducted by NORC at the University of Chicago.

[13] Instances in which several of the teams observed deviations from expected behavior amongst English-speaking respondents are alluded to in this report, and in which that behavior reflected the influence of factors also found to mediate behavior and communication in the target communities of language. The single most noticeable of these factors in the field observations was that of linguistically-signaled ethnic difference between native-English speaking respondents and NRFU interviewers who spoke English as a second language. In these instances the ethnic difference (and by extension the likelihood of a different nationality of origin) of English as a second language NRFU interviewers tended to be signaled (to native English speaking respondents) through a combination of: (1) idiomatic pronunciation ("accent"); (2) the utilization of communicative conventions borrowed from the interviewers' own original communities of language; and (3) in some cases at least, by certain physiological features (of the interviewer) that currently serve as widespread symbolic currency in the assignment of ethnic/racial identity in everyday interaction within mainstream U.S. society. Although we only briefly allude to how this linguistically-signaled difference affected the behavior of native-English speaking respondents in this report (e.g. the example provided below of the hostility engendered vis-à-vis NRFU interviewers of Chinese origin) the frequency with which this factor was independently observed in the different field studies suggests that this topic that merits further focused analysis and perhaps even additional field research. Ultimately however that would require a different sort of analysis and study in its own right.

3.5.2.4 Focus group and expert informant interviews

In five of the communities of language (Portuguese, Russian, Chinese, Korean, and Vietnamese) several factors (see the Limitations section below) conspired to limit the number of CIE's in the target language that our teams were able to observe. Concerned that the these teams might fall far short of their target observation numbers, the Census Bureau Coordinating Research Team instructed these field teams to conduct additional focus group interviews with enumerators and with LEP respondents (the latter recruited on an opportunistic basis). Given that this was a last minute adaptation to unforeseen circumstances, the Census Bureau Coordinating Research Team did not develop separate protocols for these focus groups, but instead instructed the field teams to use the already developed debriefing protocols as the basis for guiding the focus group discussions. Explicit instruction was added that the field teams should also use these focus groups to discuss patterns of behavior they seemed to see as emerging from the observations that they had made to date. While one of these field teams ultimately made their target, and another came much closer to its target, three of these teams still conducted one or more focus groups. The specific number, characteristics, and findings from those focus groups and the ways in which they were drawn upon and analytically triangulated with the findings from the interview observations and the debriefings varied and thus are described in more detail in each of the individual community-of-language reports.

3.6 Description of fieldwork

In May and June 2010, ethnographers in the seven language teams conducted fieldwork by going out with census enumerators to observe the 2010 Census operation known as NRFU interviews in the selected sites. Each language team was tasked to observe 60 interviews in the target language and 30 in English within the time frame of two weeks. However due to the nature of any ethnographic research, there were unexpected and unpredictable circumstances. Therefore the number of interviews tasked for observation was set as a target rather than a fixed goal. Oftentimes, much can be learned from the failure to reach the target number in fieldwork.

Each research team member accompanied enumerators anywhere from 4 to 16 days, with an average of ten days for each team member. Each team member accompanied 2-3 enumerators during the fieldwork process. In total, the seven research teams accompanied 101 enumerators across the research sites and observed a total of 586 NRFU interviews, with 308 interviews in the target languages, and 278 interviews in English. The following table is a summary of the number of interviews observed and number of enumerators accompanied by the research teams.

Table 2. Number of interviews observed and enumerators accompanied in field work

Language	Sites	Interviews observed	Interviews in target language	Interviews in English	Enumerators accompanied
Arabic	Michigan	90	61	29	8
Chinese	Maryland New York Virginia	72	23	49	18
Korean	Maryland New York Virginia	84	23	61	14
Portuguese	Massachusetts Rhode Island	74	41	33	13
Russian	New York Ohio	103	67	36	18
Spanish	Illinois	88	63	25	23
Vietnamese	California	75	30	45	7
Total		**586**	**308**	**278**	**101**

Observations occurred until the targeted number of interviews among speakers of the target language had been collected or until the research team exhausted all their efforts to find more cases to observe within the timeframe. Some teams were more successful than others in reaching the target number of interviews in the target language. Some language teams were not able to observe the targeted number of in-language interviews due to scheduling issues or coordination problems. When this happened, the research teams were instructed to conduct additional in-depth interviews or focus group discussions with speakers of the target language to obtain additional data for analysis and for triangulation of their interpretation of observational data. Three language teams (Chinese, Korean, and Portuguese) adopted this approach and conducted focus groups and in-depth interviews with speakers of the target languages, using the respondent debriefing questions to elicit their perceptions of and reactions to the 2010 Census.

At the end of each NRFU interview, the ethnographers used a previously developed protocol to conduct qualitative respondent debriefings. This protocol provided initial questions that were followed by probes about their knowledge of the census and about the NRFU interview experience the respondents had just completed. These debriefings were conducted with each NRFU respondent immediately following their completion of the Census Enumerator Questionnaire.

The enumerator debriefings were conducted in between NRFU interviews when the ethnographer was accompanying the enumerator from one household to another. In some research sites, the ethnographers organized focus group discussions with enumerators to obtain their input and feedback.

3.7 Analysis methods

Data that was analyzed include taped NRFU interviews, ethnographers' observational notes, respondent debriefings, enumerator debriefings, focus group discussions, and in-depth interviews for some language teams. There are two levels of analysis performed on the data collected: by individual language teams and by the Census Bureau research team.

3.7.1 Analysis by individual language team

A first level of analysis involving multiple steps was undertaken by the individual language teams during and immediately following the data collection process. Thus throughout the data collection process researchers continuously recorded their own reflections on the observations as these occurred. A second step in analysis involved all the members of each team meeting together when the fieldwork was completed to compare experiences and collectively identify issues that seemed most central to the NRFU experience. At this step, the team members reviewed their observation notes and shared their input at the team meeting.

Subsequently the team's lead ethnographer reviewed the recorded interviews and field notes produced by all of their team members. This review included multiple readings of debriefing reports and transcriptions in order to address common questions and issues, including: (1) how language differences affected the interaction between the enumerator and the non-English speaking respondent; (2) which interaction effects were specifically attributable to linguistic factors as opposed to other social factors; (3) what were the processes by which interpreters were recruited; (4) what roles interpreters played in face-to-face interviews, specifically in mediating the data collected; and (5) how efficient was the standard translation vs. translation on-the-fly. The data were also carefully reviewed for factors hypothesized to influence interactions by the research team before data collection began concerning: terminology, sex, national origin, ethnicity, and religion.

In conducting this first level of analysis, each field team was able to compare these issues against the NRFU interviews with native-English speakers that they had observed. These English interviews provided an implicit baseline of comparison that served to highlight differences in the behavior of the target community of language. This level of comparison identified the primary focus for each field-team's analysis and reporting (although comparisons between English-speakers and LEPs are rendered explicitly in many instances in the individual case studies).[14]

A subsequent step in the analysis involved several rounds of extensive queries and consultation between the team leads and the overall project leaders, which resulted in initial draft reports

[14] Each of these can be consulted in its own right at <http://www.census.gov/srd/papers>.

specific to each team. This was then followed by a day-long analysis workshop at the Census Bureau in which all of the research teams presented initial findings and compared provisional findings. The analysis workshop provided a venue to develop a framework for suggesting recommendations. Following the analysis workshop, the team leads conducted additional focused reviews of data to substantiate their recommendations for the target community.

3.7.2 Analysis by the Census Bureau Coordinating Research Team

A final level of analysis involved the Census Bureau research team conducting multiple rounds of reading and discussion of the analysis and evidence presented in each field team's report. In the course of this level of review the Census Bureau research team reviewed a subset of the primary data (field notes, site reports, and transcripts) from each language team.

The two goals of this level of analysis were to: (1) review and clarify the analysis that had been conducted at the field team level; and (2) to begin to identify the level at which issues emerged that were common amongst the seven language groups; as well as issues that were more specific to particular language communities. As mentioned above, a one-day analysis workshop was convened in which the seven team leads and the Census Bureau research team members worked together to define the areas that needed more attention and additional analysis.

Additionally, the language teams transcribed all the interviews that they were able to record in the field. A total of 127 NRFU interviews were transcribed and translated into English for further analysis, with emphasis being placed on interviews in the target languages (Arabic, Chinese, Korean, Portuguese, Russian, Spanish, and Vietnamese). A total of 103 NRFU interviews by native English speakers were also transcribed. A subset of these transcripts has been further analyzed by members of the Census Bureau research team in an effort to further explore interviewer-respondent interaction, question-answer patterns, interpretation of census questions, and topic flow pattern. This type of technical linguistic analysis -- though conducted with a limited subset of the primary transcription data[15] -- has already provided valuable insights that inform some of this report's recommendations for census question development and evaluation, questionnaire design, and interviewer training.

Ultimately this final round of analysis involved a synthetic comparative framing by the research project leaders at the Census Bureau which produced a draft version of this report, followed by the circulation of that draft to the lead ethnographers from the respective teams for additional comment.

4 LIMITATIONS

Conducting the fieldwork for an ethnographic study of this scale involves coordination and communication at multiple levels, across multiple sites, and among numerous ethnographers in

[15] As we point out in our conclusions, in the future this rich trove of transcriptions and accompanying interviewer notes has the potential to be mined for far more extensive additional sociolinguistic analysis that can speak to a variety of central methodological concerns.

the research teams at the onset of the fieldwork. It also involved communication and coordination with multiple layers of a highly bureaucratic organization (Census Bureau) during its peak field operations, including negotiating access for research activities that ran in parallel to the decennial census, but were often not immediately seen, at the local level, as dovetailing with the primary mission at hand. Once the ethnographers were out in the field, they also encountered a number of additional unexpected challenges that at times hindered the execution of the research process as planned. This section describes some of the major challenges encountered in the fieldwork and the limitations they impose on the current study, with the intention that these observations will provide lessons learned for future research of a comparable nature.

4.1 Navigating multiple layers of Census Bureau organization: Timing effects

First, it proved to be a more of a challenge than originally anticipated to navigate the different levels of internal Census Bureau organization (the "gatekeepers") and obtain permission for research that was highly time-sensitive (in that the ethnographers needed to observe activity that took place in a narrowly prescribed window). Since this was the first project of its kind, it took more time than anticipated to communicate the purpose and scope of the study between the main, RCCs and LCOs, and to obtain approval for fieldwork or scheduling details. Although these issues were eventually resolved, some took considerably more time to be worked out. As evidenced in the discussions of these issues in the individual field team reports, there was considerable variation at the RCCs and LCOs in the extent to which these challenges presented themselves and in the adaptations that the research teams were compelled to make as a result. The fact that on-site observations added to the workload of RCCs and LCOs, whose top priority was to complete the census, was one factor that contributed to delays in approving our field teams' observations in some areas. Some areas had to cope with numerous observations from other sources (including those from government agencies), and understandably sought to limit these in order to ensure the census work got done without backlash from the public. As a result some teams actually had to be re-assigned to states other than those originally requested or intended.

These factors, in combination with the fact that the NRFU operation progressed faster than anticipated for the 2010 Census, meant that the research teams generally started their observation later in the NRFU process than originally envisioned.

As a consequence, the teams missed many opportunities to observe many interactions between English monolingual interviewers and non-English speaking respondents. This happened in large part because by the time the teams did gain access, most non-English speaking households had been identified and were being targeted by a second round of NRFU interviewers who had been assigned based on their knowledge of the languages in question. Another factor that may have come into play in some cases was the efforts of the LCO supervisors to purposely pair the ethnographers only with bilingual enumerators, either because they misunderstood the goal of the research, or in an effort to demonstrate that they were responding adequately to the linguistic challenges that confronted their operations.

While this development provided for ample insight into the perspectives and strategies of enumerators who shared the language and culture of their non-English speaking respondents, it limited the observations of English-speaking monolingual enumerators in the same type of situation in a way it was not foreseen. It is thus important to highlight that the overall basis for the comparison of bilingual and monolingual enumerators is more constrained than it would have been desired. Wherever those comparisons were possible they are highlighted in the individual field reports. The analysis thus also sought to draw upon other comparisons. These included those between bilingual enumerators with different levels of linguistic fluency and cultural knowledge (evidenced especially in those cases -- such as the Portuguese, Vietnamese, and Korean communities, in which some bilingual enumerators were native speakers and others were heritage speakers). It also included comparing the observed strategies and behavior of the same bilingual enumerators when interviewing LEP respondents with their behavior when interviewing native English speakers, and discussion of their explanations for any observed differences during the enumerator debriefings.

Engagement with the NRFU process at a later stage is also likely to have resulted in some language teams observing some of the most challenging and difficult NRFU cases simply because they represented the end of the cycle of the NRFU operation in Local Census Offices (and thus were usually "repeat tries").

4.2 Interaction effects

As discussed in more detail in the individual reports, enumerators were often fearful that the ultimate purpose of the observations was their evaluation. All teams had to invest considerable amounts of time and energy dispelling this notion. Once enumerators realized that Census Bureau Headquarters was not evaluating them, most began to be more open and some even asked for assistance during some of the NRFU interviews that were being observed. This posed its own set of issues in cases in which the linguistic expertise of the teams was solicited by the interviewers, thus threatening the teams' ability to observe the role of linguistic difference in mediating NRFU interview outcomes. In most instances, the teams did not provide any assistance since the goal was to simply observe the interactions between the NRFU interviewers and respondents.

4.3 Locating limited English proficient respondents

One of the most significant challenges encountered by some of the teams -- and one mirrored in the NRFU enumeration itself -- was simply that of locating non-English speaking respondents to observe and debrief. Efforts to observe in-the-field interactions between census enumerators and non-English speaking respondents necessarily depended to some extent on relying on the capacity of Local Census Offices to direct the teams to areas predominantly populated with speakers of target languages. The extent to which different Local Census Offices proved capable of doing this was highly variable.

With some communities, such as in the case of Chinese speakers, one important factor that may have affected results is that there appears to be less of a tendency for Chinese speakers to

constitute geographically contiguous "ethnic enclaves" outside of the core settlement areas of Los Angeles, San Francisco, and New York. This appears to have been particularly likely for those with higher levels of education. Whatever the reasons, the fact is that locating Chinese-speaking respondents proved to be extremely difficult.

Though all of these hurdles presented challenges and resulted in many days when the research teams were only successful at observing a few interviews, most of the teams did manage to collect and observe their target number of observations and interviews. In all cases, a sufficient amount of data was collected to inform the project's comparative objectives, especially given the exploratory nature of this study. All of the challenges documented here are a part of any ethnographic field study, which are inevitably dynamic in nature and typically require researchers to adapt in the field, and analysts to adjust to data that may be incomplete and fall short of idealized targets.

4.4 Limited number of cases observed: Non-representativeness

This research is the first Census Bureau ethnographic study of LEP communities (or for that matter of English-speaking respondents) that is based on the systematic observation of the NRFU interview process as it occurred in real time. As such it has produced a form of rich and hitherto unavailable data upon which to draw insights and with which to explore a broad range of questions and issues.

At the same time it is important to underscore that the number of cases (consisting of observed NRFU interviews and respondent/enumerator debriefings) conducted was limited. The research sites were in only nine states and the observed cases involved only limited numbers of households (ranging from 23 to 67) in each of the seven communities of language. Moreover, neither these sites nor these households were selected through procedures that meet any statistical requirements for ensuring their representativeness with respect to those communities as a whole. Therefore the data the findings produced in each of the field studies should not be viewed as having a statistical basis for valid generalization, and thus as representative of any of those communities.

By extension the same limitations impose themselves on this report, which discussed patterns synthesized from a comparison of those specific field studies. The authors do not therefore make any claims that the issues identified are generalizable on statistical grounds to represent all LEP communities in the U.S.

4.5 Comparison and evidence

The analysis in this report is based on a comparison of the seven field studies that were conducted in the individual communities of language. Thus while the Census Bureau Coordinating Research Team members personally reviewed a significant subset of the data produced and analyzed in those field studies, the analysis is not one that is based on a direct comparison of the primary data from those studies. Rather, in this report the authors are primarily drawing comparisons among the findings of those reports. The most significant

limitation this poses is that the presentation of evidence and the data from those reports are largely synthetic, often summarized, and selectively illustrative.

The qualitative evidence collected in each of those field studies is itself vast and thus does not always lend itself to being presented in as full a format as is possible in the less contextualized and more schematic manner that is to be expected in quantitative work. It is nevertheless the case that a much fuller description of the evidence and the analysis that underwrites their primary findings can be found in those individual studies, which either are already, or shortly will be, placed on line. The authors encourage those who are interested both in understanding more about the individual community findings or the evidentiary base that they have compared to reach their conclusions in this report to consult those studies directly.

5 RESULTS

The discussion of the results is organized to focus on five topics that proved central to enumerating non-English speaking and LEP households in the 2010 Census. They are:

1. Challenges in negotiating and maintaining access to respondents.
2. Census questions and NRFU questionnaire.
3. Use of in-language materials in NRFU interviews.
4. On-the-fly translation and use of interpreters.
5. Non-English speaking respondents' perceptions of and reactions to the 2010 Census

5.1 Negotiating and maintaining access to respondents

5.1.1 Introduction: The social framing of the Census Interview Encounter

By definition a NRFU interview is a fall back rather than the preferred mechanism for the collection of census data. NRFU interviews thus only take place if the prescribed first option (return of the mailed-in form) has failed to elicit the desired information from a respondent. Although a total lack of awareness of the mail-in option (e.g., because of language or literacy barriers, misplaced mail, misunderstanding of the process itself, etc.) underwrites some portion of non-participation in the mail-back option, it is reasonable to assume that a significant portion of this non-participation reflects the fact that NRFU interview respondents as a group harbor more reluctance about participating in the census process than does the rest of the population. There are many different reasons for this greater reluctance which can range from a relatively passive disinterest (because filling in a form is simply regarded as unimportant or time consuming), to fear or suspicions about what participation might imply, and finally to outright hostility towards the process and or the authority implementing it. In fact, the field observations demonstrate that reluctance and non-participation is often ultimately informed by several of these motives in combination. In short, while all of these issues are ones that have been well documented as presenting challenges to survey researchers, they are likely amplified in the NRFU interview context -- regardless of the respondent's language or cultural background.

Consequently, a first challenge that all NRFU interviewers inevitably must confront is that of negotiating access to respondents who by definition are likely to be either relatively unaware of, and/or disinterested in, and/or also reluctant to participate in the census process in the first place. The negotiation of access may be further complicated by a reluctance of respondents to engage and interact with unsolicited strangers, especially those who represent government authority. If these observations hold true for the NRFU interview process as a whole, the challenge of negotiating and maintaining access to interview subjects is often amplified in situations where the interview subjects involve households in which English is either not spoken or not the primary language.

Language -- as well as meta-communicative competence -- plays an important role in negotiating access to non-English speaking NRFU interview subjects. However, a census enumeration interview is not merely a communicative event but is first and foremost a form of social interaction between at least two people (i.e., respondent and enumerator). Actor engagement in any given social interaction encounter is itself affected by how that encounter and the roles of its protagonists are defined and understood; or put in other terms, how the a social encounter is "framed" (Goffman, 1974).

Framing involves establishing a "social register" for the interaction that provides a mutually recognized set of expectations about the objectives, social roles, and interactional rules for the participants. Thus, for example, a frame between two individuals that is socially registered as a "commercial transaction" would establish different guiding expectations about that interaction than would a frame that was socially registered as a "friendship encounter." There is a considerable literature that discusses the challenges that arise in negotiating and sustaining the interview frame with respondents in survey research (e.g., Couper and Groves, 1992, 2002; Groves and Couper, 1996, 1998; Morton-Williams, 1993; Couper, 1997; Maynard and Schaeffer, 2002a, 2002b). Focusing almost entirely on interactions among interviewers and interviewees who share a language, this line of research has primarily examined framing challenges that arise from different interests (between the respondent and the interviewer), or (less commonly) from forms of initial miscomprehension. However in constituting a frame for any particular instance of social interaction (such as a NRFU interview), the respective participants also operate on the basis of a set of assumptions that are a product of their own cumulative socialization experiences and cultural milieu.

In this respect, NRFU enumerators of non-English speaking households face additional challenges in establishing the definition of the situation, i.e., the "framing" of the CIE in the first place. In part this is because the prescribed census protocol reflects assumptions about how the CIE is likely to be framed that are grounded in a set of experiences and cultural knowledge specific to the American social context and that non-English speaking immigrants quite often simply do not share. Moreover, the protocol provides limited, if any, prescriptions for "repair" (Schegloff, 1997; Schegloff, Jefferson, and Sacks, 1977; Sacks, 1992; Moore and Maynard, 2002) when miscomprehension does occur. This also reflects a specific cultural milieu of production and linguistically-specific meta-communicative repertoire.

These assumptions and expectations are reflected in the NRFU interview protocol (see Appendix C), which outlines the steps in opening the interaction as:

1. Greeting and introduction of self.
2. Verification of address.
3. Introduction of topic and emphasis on the short amount of time needed for the interview.
4. Assurance of confidentiality.

The field observation studies showed that the NRFU enumerators followed this protocol much more closely and far less problematically with English-speaking respondents than tended to be the case with LEP respondents. When approaching English-speaking households, enumerators usually opened the interaction by sticking to the interview protocol. Generally all the prescribed steps were followed and in sequence (except for the verification of address; see the table below). At most English-speaking households, enumerators introduced themselves by name, showing badge and affiliation with the Census Bureau in a very direct, straightforward manner. English-speaking respondents' reactions, whether positive or negative, had primarily to do with how they felt about the census and the federal government. Table 3 gives an example of conversational strategies that enumerators employed when approaching English-speaking households.

Table 3. Enumerators' Conversational Strategies to Obtain Interview (English-speaking Households)

Conversational strategies	**Examples of strategies**
#1 GREETING and TIME:	• *"Hi. Can I have just a few minutes of your time? It's for the census. We will be done in a few minutes and I'll never bother you again."* • *"It takes just a few minutes"* • *"It's just a few easy questions. It takes no time."* • *"You'll see, it's nice and easy."* • *"We will be done in 2 minutes."*
#2 NAME and TOPIC:	• *"My name is _____[badge]. It is for the U.S. Census to count the people living in this house."* • *"I am working for the government to count people. My name is_____. [badge]."* • *"I have just a few questions for the census. Just to count people. My name is _____."*
#3 CONFIDENTIALITY:	• ***"****It is all confidential. You can read it in here." [handing information sheet]* • *"It is all confidential. All that you say is protected under the law." [Gives information sheet in the end.]*

However, many of the assumptions that informed how English-speaking respondents framed the CIE were simply not shared by non-English speaking respondents who hailed from other social and cultural backgrounds and whose own status and social experience in American society may

differ in important ways from that of English speakers. Accordingly, the field research teams found that, to varying degrees in different interviews, many of the interactional guidelines prescribed by the protocol not only failed to secure and sustain access to needed information but, when deployed in fact often inhibited it.

Consequently, bilingual enumerators generally drew upon the social and cultural knowledge they shared with their respondents to reframe the CIE in an alternative "social register" that helped them build the rapport and trust with LEP respondents necessary for securing access and needed information. However, while these alternative frames proved more successful (and often actually necessary) to gain and maintain access and acquire required information from non-English speaking respondents, they almost always implied breaking, to greater or lesser degrees, with some aspects of the prescribed interview protocol.

This section describes and analyzes the intuitively and reflexively developed (often by trial and error) doorstep strategies that bilingual enumerators deployed to define the CIE in terms that would secure and maintain access to respondents and prove conducive to the solicitation of the information sought by the Census Bureau. It focuses on the factors that were observed by the field teams to appear to most often influence access, interactional success and failure, and information transmission during the CIE across as well as within particular language groups.

As a caveat to the discussion of these characteristics, the authors want to highlight that the qualitative methodology that this study employed is not one that can rigorously isolate the effects of certain characteristics from others (e.g., "sex" from "age") in the way, for example, that conventional multivariate analysis might attempt. The discussion of these characteristics and the method deployed to identify the fact that they appear to have salience in interaction is based primarily upon the premises that guide ethnomethodological approaches. However, the fact that certain of these characteristics may have been noticed more as playing a role frequently in any given community or across the various field studies should not be taken to imply anything about the precise weight of characteristics relative to each other in the determination of action in any given instance, community, or in LEP populations as a whole. It is precisely because the authors do not intend to make comparisons across them that each characteristic is discussed in isolation from the others in this report.

5.1.2 Factors affecting CIE framing (and its conduciveness to gaining/maintaining access and soliciting needed information)

Analytically, it is important to realize that the "CIE frame" was almost never a "given" but had to be negotiated in the course of interaction (i.e., in the course of the NRFU interview) itself. The ability to initiate and sustain access thus depended largely on the ability of enumerators to initially propose a definition of the situation that respondents would recognize as meriting their participation. Maintaining access then also required the interviewers to variously reinforce or modify that definition in ways that sustained respondent participation and ensured the quality of the same. This is the process that will be referred to as "CIE framing."

The analysis of this field study data highlights three primary factors that significantly affected the success of enumerator efforts to propose and sustain "CIE frames" that allowed them to achieve their informational objectives.

A comparison of the individual field study findings suggests that three factors were most noted by the field teams as appearing to affect enumerator success in proposing and sustaining "CIE frames" conducive to proceed with NRFU interviews.

Shared Identity: One of the most commonly noted factors was the enumerators' ability to claim some form of shared "in-group" status vis-a-vis respondents through their presentation of claims about their social identity, most particularly their "ethnicity." The ability to claim some degree of shared "in-group" status with respondents appeared in certain instances to be a necessary (though not usually sufficient) step in constructing a CIE frame that secured access and respondent participation.

Social/Cultural Knowledge: A second factor that appeared to affect the success of enumerator efforts was the extent to which enumerators shared social and cultural knowledge with respondents. They could draw upon this shared social and cultural knowledge in order to propose and manage a "social register" for the CIE frame that was recognized as non-threatening and as valid and sensible. This included knowledge about specific historical social experiences and cultural understandings, postures towards government and authority, specific concerns about how information could and might be utilized, and any other form of social information relevant to encouraging or inhibiting interaction. Notably, the "social registers" that appeared to be most effective differed across these immigrant communities. However, despite their specific differences the strategies that were used to establish these social registers usually required departure from the official census protocol.

Meta-Communicative Competence: A third and cross-cutting factor that appeared to have a significant impact on the CIE process -- including access and information collection -- were the meta-communicative repertoires that define communicative events and govern communication within these different communities of language. "Meta-communicative repertoire" is a technical term drawn from the interdisciplinary field of sociolinguistics (see Briggs, 1986) that refers to how shared understandings about behaviors, social norms, and a variety of other aspects of social context play an important role in affecting how a spoken utterance is understood in any given instance of communication. These factors can vary from the tonality of expression (i.e., in English the utterance "oh sure!" can be understood as either an affirmation or as an expression of sarcastic denial depending on tonal inflection), to understandings about what can (or cannot) appropriately be said in certain social contexts or among particular social actors.

From the perspective of enumerators concerned with ensuring that the CIE was a success, these meta-communicative repertoires imposed rules they needed to know and follow in order to frame the CIE in a culturally appropriate way that would provide access to, and secure information from, their respondents. In many cases enumerators' decisions to omit, substantially reword, re-sequence, or otherwise modify questions in ways that departed from prescribed protocol appear to have been largely driven by a desire to not only obtain information, but also to successfully

sustain interaction and access in a culturally appropriate manner. The role of meta-communicative competence as it pertains to establishing effective CIE social registers and signaling shared identity is addressed throughout this section. Other aspects of this dynamic are addressed in more detail in the subsequent section that focuses on challenging questions on the NRFU questionnaire and the strategies deployed by enumerators for coping with them.

5.1.2.1 Signaling shared identity and diminishing social unfamiliarity

Identity -- in particular "ethnicity" -- was one of the factors that appeared to most frequently affect enumerators' ability to negotiate access and "frame" the CIE as a form of social encounter conducive to collecting the required census data. Non-English speaking respondents are more than likely immigrants from other countries. Thus their own sense of identity indexes their countries of origin and the cultural economies of identity therein, as well as their experience of being ascribed in what may be entirely different ways within larger American society. In almost all of the communities of language in which this field study was conducted, the signaling of some level and form of shared social identity with respondents was an explicit strategy deployed by enumerators. It was also a factor that both respondents and enumerators highlighted as one they viewed to play a significant role in the extent of enumerator success in negotiating access to respondents. Invoking some form shared identity thus constituted a claim (by enumerators) of diminishing unfamiliarity (with respondents) as a basis for increasing trust and rapport and thus in securing access.

However, the extent to which enumerators were able to successfully claim some sense of shared identity, the strategies they deployed to do so, and the effect of these claims in securing access, varied across the different communities of language. This is due to the fact that several language groups (e.g., Portuguese, Arabic, Russian, Spanish) encompass individuals that either: (1) hailed from different ethnic groups within the same nation, and/or (2) were classified in the U.S. as either ethnically homogenous despite regarding themselves as ethnically differentiated (or vice versa) (e.g., those commonly ascribed in the U.S. as "Russians" who might see themselves as Jewish, Ukranian, etc.; or those classified in the U.S. as "Hispanics"); and/or (3) who hailed from different nations/societies in which categories of race and ethnicity have been socially constructed in different ways (e.g., Brazil, Cape Verde, and Portugal in the Portuguese language case).

At the most basic level the deployment of shared language appeared a first and positive role in signaling shared identity and negotiating access. In all of the communities of language (especially so in the Arabic-, Russian-, and Korean-speaking cases, and to a lesser extent in the Vietnamese-speaking community) the field researchers reported that NRFU respondents seemed more likely to respond positively if the NRFU interviewer announced their presence in the respondent's native language. Each individual community-of-language field report contains detailed reviews and offers elaborated examples of the evidence from debriefing interviews and observations that was analyzed to reach this conclusion.

In exploring why this was the case, it is important to consider what language itself was likely to signal to respondents about the potential CIE frame. For native English speakers, announcing or

initiating the NRFU interview in English is relatively neutral and uninformative in terms of whether the social interaction that is being proposed is likely to involve someone with whom one has a social connection or someone who is a relative stranger. By way of contrast, to a non-English speaker the announcement or initiation of the NRFU interview in English is indicative of a much greater likelihood that the interaction potentially involves a stranger. Conversely, an announcement or initiation in the respondent's native tongue is also indicative of a greater likelihood of some form of social connection, inasmuch as the use of the respondent's language (rather than English) already suggests that the enumerator knows something specific about the respondent. In short, the use of the respondent's language to announce the presence of the enumerator and to solicit participation appeared to play a role in defining the CIE frame as a situation that did not necessarily involve total strangers and that could potentially be based on social connection.

It is important to note that this initial linguistic (or otherwise) signaling of the potentiality for social connection is arguably more important for CIE framing (and thus the securing of access) in immigrant communities whose view of the forms of acceptable interaction with strangers may be rather different from that of the broader "mainstream" American public.[16] Such differences may be the product of either cultural understandings forged through socialization elsewhere or of their social status and experiences in American society itself, or of some combination of both.

Thus, with respect to cultural conventions concerning interaction with potential strangers, the Russian-speaking ethnographic team (led by a Russian-born and native-speaking Russian ethnographer) observed that "conventional norms of social interaction predispose Russians to treat strangers with more indifference or even with (what in an American context might be regarded as) 'hostility.' Only those people who are viewed as in-group members receive a warm and friendly reception … (consequently) starting the interview in the target language tended to work positively."

Similarly, the Korean-speaking team's observations resonate with Sohn's (2006) assessment that: "Whereas Americans are willing to talk to strangers or people they don't know well and smile and offer greetings to anybody who passes by, Koreans usually don't smile or offer greetings to strangers, tending to avoid talking to strangers or out-group members, while they are eager to talk to in-group members, acquaintances, and interested parties such as one's clientele" (Sohn, 2006, p. 11). While Sohn's assessment might be too general, to a certain degree, it reflects a tendency in cultural preferences. The importance of language, even when involving limited fluency, in signaling "in group identity" and in positively framing the CIE is evidenced in the following statement by a Korean-American enumerator who reported:

> "There were cases in which they would not even open the door, but as soon as I switched to Korean, they opened the door."

Reluctance to interact with strangers may also be more pronounced among non-English speaking respondents for reasons other than culturally constituted ideas about strangers per se. In cases in

[16] Although it is noted that a range should be expected within the "mainstream" American public as well.

which non-English speaking respondents have tenuous legal status or are implicated in quasi-legal activity this reluctance may also be related to their experience and status in the U.S. Although neither the NRFU interview nor the field research debriefing interviews ever directly asked about legal status, this nevertheless surfaced as a factor of concern in all the communities studied, and in some cases was directly implicated in how the signaling of enumerator identity affected the negotiation of access. For example one young Korean-speaking respondent in new York commented during a debriefing interview that he had been nervous about responding to the NRFU interview because of his legal status, but he eventually participated in the interview. This is because the enumerator was Korean, and he felt he could trust the enumerator to be truthful when he said the data would be kept confidential.

Based on the respondent debriefing summary, comparable concerns with undocumented status were noted as factors that, while lurking below the surface, seemed to influence the negotiation of access among some segments of the Portuguese-speaking population (in particular Brazilians), younger, non-Jewish segments of the Russian-speaking population, and among Spanish speakers observed in this study. For other language communities, somewhat different concerns with legality/ legal authority were reported during the respondent debriefings to amplify reluctance to participate in the census and suspicion of strangers (and thus greater discomfort with English-speakers). For example, among older segments of the Russian-speaking population, there was a concern of age-reporting (some of whom may have intentionally misreported their age in order to collect welfare benefits). Among some Korean-speaking respondents, there was a concern that personal information might be solicited to commit fraud. Vietnamese speakers were concerned less with their legal status than with scrutiny of unreported "underground" economic activity. Arabic speakers seemed to be sensitive to intensified government scrutiny over the last decade. Signaling shared ethnic identity was thus often deployed as a first step of a broader strategy by enumerators for coping with these anxieties and the threats they might pose to CIE frame-making.

Notably, while an enumerator's use of the respondent's native language was often used to signal shared ethnicity, fluency was not always a requisite for that signal's success in claiming an apparently helpful degree of shared identity with respondents or concomitantly in securing access. Thus the Korean research team consistently observed that Korean ethnicity, signaled as much by physiological appearance and self-attribution, rather than, and even despite limited, fluency in the Korean language, seemed to matter the most in terms of securing access. This is illustrated by the many observed cases in which Korean-American enumerators were excused their failings in Korean language proficiency. As just one example: on one occasion, a young Korean-American enumerator conducting a NRFU interview with two Korean elderly respondents inadvertently (and unknowingly) used impolite terms and non-honorific expressions many times toward elderly respondents. This would generally be considered to be extremely rude in Korean society. However, the respondents readily excused these failures because he was "Korean" and evaluated the enumerator's interview skills positively during the respondent debriefing session, noting that: "He was very kind and did a good job." Similarly one Korean-American enumerator with very limited Korean language proficiency noted that just being able to say just "hi" in Korean signaled his Korean ethnicity to the respondents and that this in turn enabled him to successfully conduct the NRFU interviews.

Interestingly, even the only refusal case that the field research team observed among Korean respondents also indicates the centrality of ethnicity -- sometimes cued merely physiologically rather than linguistically -- in securing access in this community. This household was visited by a male Korean enumerator in his 60's. When he knocked on the door, a female in her 60's to 70's was taking a walk around the townhouse complex. When she saw the enumerator knocking on her door, she approached and asked in Korean, "What brought you here?" She was a bit cautious, but friendly, and when the enumerator told her that he came for the census, she stated -- still in a friendly tone -- that she was just visiting her children in this household and so she was not able to answer. She also provided information on what time her children would usually come back home, and then tellingly noted: "I wouldn't have even come to talk to you if you had been American, but I saw Korean people standing in front of our place, so I came."

In their debriefing interviews, Vietnamese respondents also expressed a strong preference for interviewers who not only spoke their language but who were also Vietnamese themselves, as per the following two quotes collected from the field team during the course of their debriefing interviews: "we are very happy when we see a Vietnamese (enumerator) because they will help us. Not so much with the Chinese or Taiwanese (enumerators); "E: What if the survey is in English, but you have a Vietnamese translator? R: It would be easier if it's a Vietnamese *person*...." Such preference, and the effect on securing access and rapport, appeared to be most evident among those segments of the Vietnamese-speaking community whose lack of English-language proficiency largely results from the limited interaction they have outside of the Vietnamese social enclave. As reported in that community study those individuals tend to be either more elderly individuals from earlier immigrant cohorts, or less educated individuals who arrived in later cohorts and found a robust enclave already in existence.

While no less pronounced, enumerator efforts to claim shared social identity with respondents in other communities of language were often less straightforward and more limited than reported in either the Korean or Vietnamese cases, in large part because the relationship between ethnicity and language in these communities was far more complex. Thus, the Arabic research team noted that ethnicity appeared to be a factor that operated simultaneously at different levels in the negotiation of access. In the Arabic-speaking context in the U.S., at the broadest level "ethnicity" thus can make reference to a sense of pan-Arab cultural commonality that differentiates Arabic-speakers from other U.S. population groups. At this pan-Arab level, "ethnicity" is signaled through explicit characteristics such as Arabic language and name, but also through reference to broadly shared values that tend to cross national differences including hospitality and the centrality of family.

While the pan-Arabic level of "ethnicity" provides a meaningful frame by which Arabic-speakers think of themselves and organize in certain contexts, it is certainly not the only way in which ethnic difference is organized in relation to language among Arabic speakers. At yet another level specific national-origin provides another point of ethnic differentiation that often maps onto colloquial Arabic dialects. The Arabic research team members encountered three national origin groups when observing NRFU interviews among Arabic-speakers, namely: Lebanese, Iraqi, and Yemeni.

At even lower levels, ethnicity is constituted somewhat differently: often through references to national origin, but also sometimes by other factors such as hometown (village), religion, and family of origin, all of which are not co-equal with, nor reducible to, shared nationality of origin.

The field research team thus observed that Arabic-speaking enumerators typically deployed strategies for securing access and achieving desired rapport by making explicit or implicit cultural references and using communicative repertoires that signaled the most intimate form of ethnic commonality with respondents that they were capable of identifying and claiming. Thus in cases in which enumerators only recognized a pan-Arabic level of ethnic commonality with their respondents they would invoke that shared identity not only or primarily through language (which might be only partially shared if they spoke a different dialect from that of respondents) but through broadly shared communicative conventions, shared cultural references, and by meeting broader expectations about social interaction (e.g., removing shoes when entering the home, responding to invitations to eat in the home). Recognition of more "intimate" forms of ethnic commonality (i.e., common nationality) led them to deploy communicative strategies that were based on the signaling of that commonality (e.g., speaking in the local dialect rather than using Modern Standard Arabic).

Other commonly used approaches by the "Arab-American" enumerators to investigate and signal the closest possible level of shared ethnic identity with respondents included:

1. Emphasizing their own Arabic names and thus invoking Arabic ancestry (recognizing this would resonate in a positive way with most Arabic-speaking respondents).
2. Probing for information about respondent background and then seeking to display connections through networks involving family or others of the same national origin as the respondent.
3. Using culturally specific communicative conventions when addressing the respondent, i.e., appropriate use of titles and address terms ("my friend", "uncle", or "father").
4. Displaying dress that would signal both Arabic identity and knowledge of "appropriate" social roles (i.e., female enumerator wearing a headscarf).

The field team observations suggested that bilingual Arab-American enumerators who were knowledgeable of and able to present their social identity claims, even if at the most general level, could be successful in forging trust and rapport even across different national and sub-national origin groups.

Ethnicity in the Russian context seems to share at least a surface similarity with the Arabic case in its broadest form and its effect on the negotiation of access to respondents. That is, broader American society tends to gloss over the many national and other social identity differences within these communities of language when ascribing ethnic identity to Russian- or Arabic-speaking respondents. In this sense, Russian-speaking and Arabic-speaking immigrants alike are used to being lumped together by Americans as "Russians" and "Arabs" respectively. While this does not fully reflect how Russian speakers think about their ethnicity or social identity (any more than it does in the case of Arabic speakers) in the U.S. context, the Russian language itself can however serve as a first marker of some relative "in group" status (not entirely unlike the

"pan-Arab" level of ethnicity already described). This can be important because, as noted by the research team, Russian culture often predisposes people to treat strangers with much indifference or even hostility, and thus access and interactional success is likely to depend on establishing at least some sense of shared "in-group" status. Their findings that Russian-speaking respondents overwhelmingly preferred and were more predisposed to engage with Russian-speaking enumerators underscore the importance that even the very general and somewhat diffuse level of shared social identity signaled by language plays in securing access and underwriting interactional success among Russian-speaking immigrants. While the other levels and forms of more specific ethno-national identity played a role in how Russian respondents and enumerators understood and addressed the race and ethnicity questions these did not have any noticeable effect on securing access or sustaining interaction during the CIE.

In addition to their use of Russian, enumerators also sought to diminish unfamiliarity at this level by responding to overtures of hospitality comparable (if somewhat different in specific cultural form) to those described in the Arabic case above. Thus for example, although enumerators were trained not to enter respondents' houses for legitimate reasons[17], Russian enumerators often accepted invitations to come into Russian respondents' homes or to discuss the possibility of broadening the social relationship through a post-interview social visit. This decision was shaped by their knowledge that the Russian cultural context any rejection of an invitation to come inside the house insults the respondent who offers his or her hospitality, and by default would reinforce the status of "stranger" and subject the interviewer to the culturally predisposed negative attitude such status invites. In the enumerator's view the most effective strategy seems to have been to accept hospitality when it was offered thus signaling some degree of shared "in-group" status with respondents that could facilitate the interview.

Among Spanish and Portuguese speakers, language and ethnicity appear to correlate the least closely of all among the communities of language observed in this field study. As is well known, Spanish-speaking immigrants in the U.S. hail from many different countries of origin, some of which differ significantly from each other in how race and ethnicity are socially constructed and categorized. Moreover as noted by the Spanish team: "There is a phenomenon that happens within the Hispanic community, especially between recent and established immigrant groups. Members of more recent immigrant groups have at times felt discriminated against by more established immigrant groups. Established immigrant groups may also frequently critique recent immigrant groups for not acquiring the English language, for side-stepping acculturation to the U.S. culture, and for entering illegally." In this sense while "Hispanic" or "Latino" may be an identity that can hold some relevance to Spanish speakers in some contexts of interaction, it can and often is contested or irrelevant in others where a variety of forms of difference (e.g. national, racial, socio-economic, cultural) may be more salient.

[17] There are legal considerations about entering someone's home and that is why enumerators are trained not to enter and more importance is given to this part of the protocols, even if it makes it easier to get responses (as it often does with English-speaking respondents as well.

Less widely known than the Spanish case, that of Portuguese speakers appears to be equally complex and plural with respect to the relationship between ethnicity and language. Southern New England is home to one of the largest concentration of Portuguese speakers in the U.S. This community first expanded in the major seaport towns of New England throughout the 18th and 19th centuries attracted by the whaling industry. Until the 1980's most Portuguese speakers in New England were originally from the Azores (itself sharing dialectical and cultural distinctiveness vis-à-vis continental Portugal and Portuguese) and from the Cape Verde islands (also speakers of Cape Verdean Creole).

In the 1980's Brazilian immigrants started to arrive at the U.S. Although they belong to the same linguistic community and shared geographic settlements in New Bedford, Fall River, and East Providence, Brazilians are clearly demarcated from the previously arrived Azorean and Cape Verdean populations. While most Portuguese speakers in New England (prior to 1970's) had little or no formal education in Portuguese, Brazilian migrants to New England arrived at the U.S. literate in written Portuguese, and most have at least obtained a secondary education in their country of origin. Additionally, most Brazilian migrants are a relatively young population. A far more significant number of this final wave of Portuguese speakers are also reputed to have tenuous legal status.

Thus, the category of "Portuguese-speakers" in the U.S. is comprised of individuals from three continents (or four if U.S. born heritage speakers are included), multiple nationalities, including at least four major dialects (as well as a number of sub-dialects) and from societies that differ in how they construct forms of social identity such as race and ethnicity.

In both the Spanish- and Portuguese-speaking context, language generally provides enumerators with a far less specific signal or potent claim to common origin with many or even most respondents that speak those languages, and ethnic commonality itself is likely to be negotiable on any terms with a far smaller subset of these speakers than is likely to be the case in the other communities of language addressed in this field study.

The one exception, in which a field team did not note that ethnic (or some comparable form of social) identity played much of a role in defining the CIE and securing access came from the Chinese field team. This team found no evidence to support the hypothesis that a shared sense of identity with the enumerator was important to Chinese-speaking respondents. That is to say, the extent to which respondents were more open to ethnic Chinese as opposed to non-Chinese enumerators was unclear, beyond the utilitarian advantages of a shared language.

However, it is worth noting that broader concepts of "Chinese ethnicity" may simply be far less relevant to recent Chinese immigrants in particular than such broad forms of identity are to members of other communities of language already described. Thus while a vibrant civic association tradition exists within the American Chinese community, these associations largely remain in the domain of long settled immigrants from Taiwan or Hong Kong, or American-born Chinese, all of whom generally have significant English language fluency. However, more recent immigrants from China who are not fluent English speakers generally do not volunteer or participate in programs. While practical issues such as timing and transportation may play a role

in this non-participation, this is also profoundly influenced by culturally-constituted understandings of sociality they bring with them from mainland China, in particular the notion of *Guanxi*.

Guanxi, or "relationships," continues to be the primary means for mainland Chinese to cultivate social, work, and personal ties (Farh et al., 1998; Bian, 1997). This concept is defined as an "an informal, particularistic personal connection between two individuals who are bounded by an implicit psychological contract to follow the social norms of *guanxi* such as maintaining a long term relationship, mutual commitment, loyalty, and obligation" (Chen and Chen, 2004, p. 306). Most researchers agree on the key attributes of *guanxi*: these networks are personal, particularistic, and usually based on a common link, such as birthplace or ancestral home (*laojia*), school, or workplace (Chen and Chen, 2004, p. 310). *Guanxi* ties shape an individual's social network, effectively limiting ties with strangers by defining some as outside of one's network of obligation and reciprocity. Thus, it may not be surprising that Chinese immigrants would not participate in social organizations that serve an ambiguous larger "ethnic" community comprised of people from China who they do not personally know. As the research team found, it was often the case that many did not know much about their own neighbors or co-residents in the very same house, who might also be immigrants from China, but were not part of a personal network, as illustrated in this field note.

> Discussing this last visit and walking a few blocks to the next address, Enumerator #3 voiced her opinions on Chinese people and privacy. According to her, many residences in this area contain one family to each room, which among other things makes enumeration complicated. She also said that this situation leads to people at the same address not knowing each other's names. (This corroborates with several of the households I visited with Enumerator #3 during our two days together.) Enumerator #3 believed that Chinese people liked to keep their privacy, especially in those kinds of situations, which was why sometimes the person who came to the door could only provide last names. (e.g., They address housemates only as "___ 先生" (Mr.)) .

Comparable indifference to the ethnic identity of census enumerators is thus also unsurprising.

As discuss thus far, enumerators went to some length to signal their shared identity with their respondents in an effort to secure access to non-English speaking respondents in all but one of the community-of-language studies that were conducted and compared in this report. The predominant strategies that enumerators used to demonstrate in-groupness and the forms of those social identities tended to be somewhat specific to each community of language. Table 4 below provides a very brief summary of the characteristics discussed in more detail in the individual reports.

Table 4. Signaling shared social identity

Language group	In-groupness characteristics emphasized
Arabic	Shared ethnicity (including language, national origin or home village, religion, family values, social customs) achieved rapport.
Chinese	In keeping with the concept of *guanxi*, or particular personal ties, finding common ground based on Chinese origin or language was difficult if not impossible for enumerators.
Korean	Korean ethnicity, signaled by physical characteristics or by language (even a brief greeting) built trust with respondents.
Portuguese	Different countries (and continents) of origin make signaling group membership difficult for Portuguese speakers.
Russian	Shared language, national identity, and social customs such as standards of hospitality made Russian respondents more likely to interact with strangers (of whom they might typically be wary).
Spanish	Due to the different experiences of established immigrants and more recent arrivals, and the variety of nations represented, makes it difficult to consider Hispanic individuals a single group.
Vietnamese	Respondents preferred enumerators who were from Vietnam and spoke Vietnamese.

5.1.2.2 Establishing and sustaining an effective "social register" (for the CIE frame)

As already alluded to, the prescribed protocol's interactional guidelines implicitly reflect a particular CIE frame. The "social register" for this particular type of interaction establishes a series of expectations about interaction and information transmission within the CIE. These include expectations that social interaction will and should be largely limited to the narrow task of information exchange, that the relationship between participants is and should be defined and confined in the CIE to the performance of the task at hand (i.e., "question asker" or "question answerer"), that the length of the relationship will/should be confined to the length of the task.

These expectations are themselves premised on a broad array of culturally-constituted understandings about sociality and about authority and governance. Among other assumptions these include an understanding that this type of personal information is largely unremarkable and inoffensive to collect, that the collection of such information is a matter-of-fact task of government, that the information will be utilized for the purposes and in the manner explicitly claimed, that such personal information is typically and acceptably collected by strangers, that the identification of a stranger with government authority safeguards and justifies the transmission of personal information that would not be acceptable to convey to a stranger otherwise.

While there is a significant literature that demonstrates that there is a good deal of variance with respect to these understandings within the native English-speaking population in the U.S., there are also grounds to suggest that the many LEP populations are likely to exhibit far greater differences in those understandings. Thus whereas native-speaking Americans certainly take a

wide-range of ideological positions on questions such as the neutrality and desirability of government surveillance, or the use of the information it collects, these positions still draw upon a common stock of social narratives and historical experiences that constitute what might be thought of as the American referential marketplace. To a certain extent the census questionnaire and protocol are designed explicitly to respond to some of the variance in that marketplace (such as in its prompt that anticipates an objection about time availability). To the extent that many LEP respondents draw upon very different historical references and culturally informed communicative and interactional conventions, it is more likely that their assumptions about interaction and communication will not be accounted for by the questionnaire and protocol. These differences are likely to make the protocol less effective in establishing the desired CIE frame with LEP respondents than for native English-speakers.

Indeed, the field teams found that -- to varying degrees in different interviews -- many of the interactional guidelines prescribed by the protocol not only failed to secure and sustain access and needed information from non-English speaking respondents but actually inhibited it. Consequently, bilingual enumerators generally drew upon the social and cultural knowledge they shared with their respondents to reframe the CIE in an alternative "social register" that helped them build the rapport and trust with respondents necessary for securing access and needed information.

Arabic: Thus, for example the Arabic enumerators sought to reframe the CIE in terms that stressed as close a social relationship as they could identify and assume vis-à-vis their respondents. As already described above this process started through a linguistically and behaviorally enacted effort to identify and signal some form of shared ethnicity, thus establishing this as an interaction among members of a shared social group rather than among strangers. This strategy was reinforced through the use of terms that metaphorically invoked certain kinds of obligations and interactional possibilities based on trust and intimacy through the deployment of deferential kinship terminology: a common discursive strategy in Arabic-speaking social contexts. Use of such communicative conventions were commonly observed by the team in interviews with older male respondents, in which the Arabic-speaking enumerators often referred to them as "my friend," "uncle," or "father" interchangeably. Witness the following transcript/field note excerpts from one interview observed by the Arabic field team.

> An enumerator used the term "my friend" to address an older male respondent and attempt to put him at ease. He also made references to Arabic phrases invoking religiosity as a means perhaps to facilitate trust: "You understand me? So God willing we will begin on good luck. This paper says that the information you will give me will be confidential between you, me and [Census Bureau]…[OK] my friend; what is the number of your apartment?"
>
> In this same interview, the enumerator referred to the elderly respondent as "uncle," "brother," and "father." Enumerators also, regardless of national origin, often used Arabic phrases to adhere to cultural norms designating respect. For instance, after reporting his age (78), the enumerator responded with a culturally appropriate phrase, "Oh, wow, may He {God} extend your age."

Bilingual Arabic enumerators also demonstrated an awareness of the role of dress and appearance -- in particular the use of sex-appropriate attire -- in successfully constituting and maintaining this form of social register. For instance, female enumerators wearing a headscarf indicated both their pan-Arab ethnicity while indicating shared behavioral expectations and gendered social norms with their Arabic-speaking respondents -- thus helping to build the rapport and trust that could underwrite access and facilitate the solicitation of information during the CIE.

While reframing the CIE in this "social register" was more effective in securing access and information, maintaining this frame often required Arabic-speaking enumerators to depart from the census protocol in several ways. Thus, for example, in order to meet expectations conveyed by the alternative social register they had established and sought to maintain Arabic enumerators often accepted invitations to enter the home, remove their shoes, or even partake in a meal (thus responding in culturally appropriate ways to "Arabic hospitality") as per the following two examples:

> Enumerator took off her shoes before entering the living room where everyone was sitting. E usually follows her intuition deciding whether to take shoes off or not, usually if there is a carpet, then better to take shoes off since people might pray in those areas. [Field notes]

> Respondent was having a big round platter full with rice, meat and some kind of sauce and it is suppose to be a traditional Yemeni popular dish that the enumerator recognized and used that as a way to establish rapport with the respondent. The enumerator mentioned that she tried that dish before and loved it. The respondent asked us a few times to join him for lunch but we said no thank you. [Field notes]

By way of contrast, the field research team also observed one enumerator who was not of Arab-speaking national origin who took a different approach -- more reflective of the prescribed protocol -- by attempting to secure access based on the signaling of authority and framing the CIE as a legal transaction. The following field notes illustrated how the approach deployed by this enumerator made it difficult to carry out interviews among Arabic speakers:

> Respondent's son tried to get excuses to avoid the interview himself by saying that he is only visiting, had to leave soon, and not sure if he will provide us with the right information, etc. Enumerator assured Son that interview will take only 10 min and that they have to complete this interview. It was hard at times to get Son to continue with the interview. [Field notes]

Korean: In the Korean case as well the signaling of shared ethnicity often appeared to play some role in re-framing the CIE as an exchange between co-ethnics rather than between strangers. As already discussed, "ethnicity" in some cases apparently overrode linguistic fluency as a factor securing access. In order to secure and maintain this social register Korean-speaking enumerators sought to utilize the Korean language's elaborate system of address terms or honorifics to talk

with people of different age groups. In the Korean context it is culturally important to use the appropriate terms of address in social interaction. Thus if an enumerator younger in age fails to show respect to the elderly respondent by using the appropriate terms of address, that violates the Korean cultural norms of communication. One of the strategies used by Korean enumerators was to adjust in their use of various titles (such as "Teacher") that often signal a culturally appropriate sign of respect (as opposed to an actual professional title or designation) and kinship terms such as "Mother" or "Grandmother" followed by an honorific suffix, along with the respondent's full name followed by an honorific suffix (also often used in official settings) that conveyed the appropriate forms of politeness to respondents, whether they were younger or older.

Interestingly however, the limited Korean fluency of a number of the Korean-American enumerators may have served as a resource that facilitated their access by adding a "pedagogic" dimension to the role more fluent (and usually older) respondents implicitly assumed in the CIE. As the field research team observed failures by such enumerators to use proper honorifics did not usually negatively affect the CIE but led many respondents to reframe it as an opportunity for appreciating the efforts of younger and less fluent enumerators to speak Korean and to assist them to successfully complete their task.

Vietnamese: Much as in the Korean case, Vietnamese also involves a much more complex and contextually-specified use of honorifics that take age, sex, and social status into account in greeting and communication. The research team noted the importance of observing these in the CIE's (and thus by extension of knowing them in the first place) and that greater success in building rapport with interview subjects occurred when these were correctly observed. There were some cases where Vietnamese enumerators used the honorifics safely so as to not potentially offend the person interviewed. For example, even though they were older than the person, they still addressed them as "older uncle," "aunts," "brother," "sister," in order to show some degree of respect. This was done for most of the enumerators. There was one incident where the enumerator made a mistake in not addressing the "correct" honorific and thus caused a little reluctance on the respondent's part.

In the Vietnamese study, several examples were also noted in which enumerators used culturally-appropriate joking strategies to establish a register for the CIE that was conducive to gaining access and to the information solicitation process.

Chinese: The Chinese study is slightly different from the Korean and Vietnamese cases. While specific linguistic features, such as honorifics, can be observed in the Korean and Vietnamese cases to signal cultural appropriateness in social interaction, the Chinese case presents a set of intricate and complex linguistic strategies that require deep cultural understanding of different Chinese groups. The majority of the respondents observed by our field team were from Mainland China, whose social structure and political system are significantly different from other Chinese-speaking regions (e.g., Taiwan, Hong Kong or Singapore). The traditional Chinese community in the U.S. is comprised mostly of immigrants from Taiwan and Hong Kong, but the new immigrant wave in the last two decades brought many immigrants from Mainland China. Due to sudden social changes taken place under the Communist ruling in Mainland China in the early 1950's, many traditional honorifics were lost in the Chinese language (Pan and Kadar, 2011). In

contrast to Korean or Vietnamese cases, which use titles and honorifics to show politeness or respect to others, Chinese politeness is signaled through very subtle linguistic strategies such as the use of other-elevation and self-denigration strategies or repetition in interaction. Following is an example from the Chinese team's observation of NRFU interviews.

Interaction between a census enumerator (E) and a Chinese-speaking respondent (R)

R: This is the situation, we just … we just bought this house, just moved in.
E: **Ah, Ah, you just moved in.**
R: It hasn't even been ten days.
E: **Ah, it hasn't even been ten days?** Based on what you just said, what about April 1st? Where were you living on April 1st?
R: Not here, on April 1st I was in a different place, I was …..
E: **Ah, on April 1st you were in a different place**
R: We … we just moved here on May 1st.
E: **Ah, you just moved here on May 1st.**
R: Right, right.

In this interaction, the enumerator repeated the respondent's answer in almost every turn. Repetition was used as a rhetorical device in order to probe deeper, a means to extract information, or a means of transitioning to another question. At the same time, the enumerator managed to engage the respondent, so repetition also functioned as a means to maintain rapport. This shows that repetition plays an important role in this exchange and is an effective device for communication between two Chinese speakers.

Interestingly the field team also noted that when addressing native English speaking respondents, Chinese-English bilingual enumerators continued to rely on this repetitive rhetorical pattern. This often led to frustration, exasperation, and passive-aggressive anger on the part of some monolingual English-speaking respondents. They appeared to perceive this literal repetition of their responses as a sign of linguistic incompetency on the part of enumerators. A Chinese team member observed an interview between a Chinese-English bilingual enumerator and a native English speaker, and recorded one such case in his field notes:

> "A white middle-aged female, visibly frustrated when asked to re-spell her name, voiced complaints about the inefficiency of census, and her tone verged on sarcasm. Ethnic issues were clearly an unspoken background aspect of this interaction; the Chinese-English bilingual enumerator carefully repeated each answer, which led respondent twice to say, 'Yes, that's what I said!' Other comment: 'How long will this take?' -- Respondent was visibly agitated, looking at her watch, sighing loudly, even grimacing."

This example shows that "tiny" linguistic features (such as repetition) may play an important role in constructing meaning. However, participants' interpretations of such linguistic features are affected by their communicative practices which are shaped by cultural schemata, upon which inferences are drawn. In the case of Chinese interviews, repetition is perceived positively. When the same feature is used by a Chinese-English bilingual to English speakers, it often leads to

misunderstanding and negative stereotypes of the speaker, and it has a negative impact on the interaction.

The field team noted that the Chinese way for establishing and sustaining an effective "social register" seemed to be to invoke an in-group association, and to turn an out-group interaction (or stranger-hood) into an in-group one. Insisting on taking an official stance during the interview did not appear to work well: it usually created indifference and disinterest on the part of the respondent. They highlighted one case in which a Chinese enumerator refused to go into the respondent's house upon invitation because the enumerator wanted to follow the Census Bureau training requirements. The respondent only answered two initial questions and then refused to continue. The interview was terminated.

Portuguese: The field research team noted that while bilingual Portuguese enumerators approached English-speaking households in a direct and impersonal manner, in contrast, when approaching Portuguese-speaking households they sought to establish a "social register" that emphasized personal connection and that was far more informal and personable. The use of this alternative social register to frame the CIE reflected their understanding that (1) conversational style in Portuguese and across its dialectical varieties is in general much more circular and less direct than in English; (2) that specific cultural understanding about the census was likely to require more extensive explanation than might be necessary for native English-speakers; and (3) that personal trustworthiness was a likely concern for their respondents.

Thus, in the cases observed by the Portuguese team, the most common approach taken by enumerators with Portuguese speaking households, (independent of the different national and ethnic differences of the respondents) was thus to first greet the person in Portuguese and in a manner that was personable rather than formal. Identifying and consolidating a personal connection to the respondent usually followed the initial greeting "Bom dia" or "Boa tarde." However, in contrast to the Arabic case, Portuguese-speaking enumerators tended to rely on a broader array of possible types of connections other than some level of common origin or ethnicity, as per the following excerpted statements made by Portuguese-speaking enumerators:

• What part of Portugal are you from? Oh I have only been in _____. Do you go there often? So I just have a few questions. My name is_____.

• Good afternoon. Do you speak Portuguese? I am so glad to find you at home. I really need to ask you just a few questions.

• Are these your kids? Great looking kids . . . Do you live here with them . . . who cares about men they are good for nothing [when enumerator and respondent are female the same age]

• Are you a member of St. Anthony church? I used to go there . . . Do you know person . . .

• Have you been here long? I am from . . . I have been in the USA since . . . I used to work ...

• So are you from S. Miguel? My grandmother is from _____. I went there last year_____What a great time. By the way my name is _____.

• Are you from Brava [Brava, Cape Verde]? I am also from Brava

• Good morning. [when sure the person is Portuguese] What a beautiful garden you have here! Do you live here? I am working for the Government to count people. I am so glad to find someone that can help me.

• What a great smell. What are you cooking? Let me introduce myself. . .

This initial informal contact also allowed the enumerator to first identify any dialectical or regional differences between the enumerator's Portuguese and that of the respondent. They then sought to quickly explain the purpose of the census simplifying the explanation as much as possible.

Additional features of the social register utilized to frame the CIE in ways that were conducive to securing access to and responses from Portuguese speakers were a "personalized supplicant" approach by which enumerators sought to enroll the assistance of respondents (after having identified some form of shared identity or connection) in a manner that invoked a culturally resonant sense of deference and /or shared identity, as per the following examples:

• If you do not mind answering, you would do me a great favor because this is my job and I am required to interview you.

• I know this is an inconvenience for you, but it is my job and if you answer I will never bother you again and you will do me a great favor.

• Forgive me for asking, but they [the census] made the questions this way . . .

Finally, (and was also the case in the Arabic and Russian contexts) the use of humor by bilingual Portuguese enumerators seemed to help them underscore and sustain an informal social register and sense of "insiderness" with respondents -- and to sustain interaction especially when questions that might seem awkward in the cultural context (such as those about sex) arose -- as per the following excerpted examples:

• I know you are really a man, but tell me are you *reaaaaaaaally* a man?

• Sorry to ask the obvious, but are you a woman? You know these days you never know . . .

• How old is your grandmother? She is so old that she does not remember how old she is [guessing age].

• Are your children biological? Yes, I know how to make babies.

It appeared that to maintain this social register the Portuguese enumerators intuited the need to break with prescribed protocol not only in terms of their linguistic interaction but behaviorally as well. Thus, as was also frequently the case in the Arabic and Russian cases (and less frequently so in the Spanish one) maintaining a social register that was likely to guarantee access and facilitate information gathering involved accepting invitations to enter the house and in essence participate in a form of "social visit." As in the other communities refusal to do so could threaten to derail a sense of shared "in-groupness" or violate other social conventions in ways that could negatively impact rapport and trust that was needed to sustain interaction and collect information.

Finally, the Spanish and Russian cases provide a particularly interesting contrast in terms of the form of "social register" that seemed to prove most successful in constituting a CIE frame conducive to securing access and needed information.

Spanish: In the Spanish case, most enumerators being observed sought to establish a "CIE frame" that (1) emphasized minimal levels of intrusiveness and required time of respondents; (2) de-emphasized authoritative dimensions of the enumerator and the information collection task itself; (3) sought to pre-empt and be responsive to concerns about how information might be utilized; and finally (4) that stressed the benefits of the census for the respondent's community. This was achieved through a "social register" that emphasized indirectness, informality, and respect. From the outset enumerators sought to convey this social register by dressing casually, and essentially mirroring a physical appearance typical of a person from the respondent's neighborhood: middle- to lower-class. None of the enumerators wore extravagant clothing, expensive brand names or formal business attire.

All enumerators observed by the Spanish-speaking field research team knew that they were in a Hispanic neighborhood and when a person of Hispanic physical attributes answered the door, the identification was always in Spanish. In contrast to the expectations governing social interaction in some other communities (such as Russian and Arabic contexts) a typical situation where two monolingual Spanish strangers meet is not entirely unlike that in which American English-speakers interact, in that the level of comfort with the other person is usually assumed to be neutral and indifferent. Thus in all cases observed in this community enumerators identified themselves using the protocol introduction set forth by the Census Bureau. However, with those respondents that did not seem to know what was going on, the enumerators then proceeded to explain less-formulaically why they were there, showed them their badge, and/or even showed them the census paperwork.

As observed in the limited cases in this study, enumerators of Spanish-speaking households also deployed communicative conventions that conveyed politeness and a non-threatening demeanor (kind facial expressions and smiling, and showing understanding by listening to what respondents had to say even if not directly related to the census when monolingual respondents wanted to chat with the enumerators). In the frequently observed situations in which respondents signaled they were reluctant to participate and were pressed for time enumerators effectively conveyed respect by stating directly the purpose of the visit, and repeatedly emphasizing how little time the interview would require. The strategy that seemed to prove most effective in

convincing still-hesitant monolingual Spanish respondents who did not have time to be interviewed, was politely pointing out how just answering the questions now would avoid numerous future phone calls and visits -- thus underscoring the present CIE as an opportunity to minimize intrusiveness. Another strategy that was employed to good effect was to take the time to explain to the respondents how important and valuable the census was for their community and to listen to any unrelated complaints the respondents may have with the census or government in general.

One issue that the field teams identified as particularly relevant to the task of securing access and soliciting information within the Spanish-speaking community was that of doubt regarding the uses of the information being requested. Several respondents indicated during the debriefing interviews that the team conducted that even though the Spanish-language cable stations informed the audience that the census responses were kept confidential, they worried that their answers would still be shared with other entities of the government:

> *Que la información se va a usar mal.*
> [I'm afraid] the information [I give] will be used against me.
>
> *Es posible que el gobierno engaña.*
> It's possible that the government [will] trick [us].
>
> *Pues sí, que no sea compartido con la gente de migración.*
> Well, yes, hopefully [the information] will not be shared with people in [the Department of] Immigration.

Several monolingual Spanish respondents were even more explicit in stating their distrust towards the purpose of the census. This can be seen in the response of a monolingual Spanish respondent to the ethnographer's debriefing interview question about whether respondents were worried about and during the census interview process:

> *Pues, a veces por las fechas de nacimiento que piden, es como, vayan a usar la fecha con otro fin o si se pierde, y es esa información, y alguien más la utilice.*
> Well, sometimes, when asking the birth date information, it's like, they could use the date for other reasons or if it's lost, and it's that information, and someone else could use it.
>
> *No, no me afectaron pero sí me preocupa, unos tenemos papeles, otros no tienen.*
> No, it [census interview] didn't affect [by desire to participate in the census] but I am worried, some people have papers [are legal], others don't.

From the research team's observations and debriefings mistrust when it was overcome seemed to be because of one (or a combination of) the following reasons: the monolingual Spanish respondents were able to see that the English-Spanish bilingual enumerator was a person from his or her own community; and/or a patiently adamant enumerator (both English-Spanish bilingual and monolingual English enumerators) went to extra lengths to ensure that they understood the confidentiality issue. In contrast to enumerators in some other groups and with

native English-speakers, Spanish-speaking enumerators were particularly careful to never underscore that participation was a legal requirement or to frame participation as a matter of "compliance with authority."

Although most of the English-Spanish bilingual enumerators observed by the field research team were Hispanic, the field research team concluded that the attitude and approach used by the enumerator might be even more important in securing respondent access and information. The most effective "social register" for framing the CIE in the case of Spanish speakers seemed to be characterized by patience; respect; polite insistence (as required) that emphasized benefits (e.g., for community, minimizing future intrusiveness); by a discursive approach that was generally informal (allowing for deviation into other discussion as per the interest of the respondent) and supplicant (rather than authoritative); and yet that contained explicit and unambiguous statements that underscored that information collected in the CIE would not be shared with immigration offices.

Russian: In contrast to social registers that initially emphasized informality and de-emphasized the legal and authoritative dimensions of the CIE, the Russian field research team found that the enumerators of Russian respondents found it effective to underscore that participation in the CIE was as a matter of legal compliance. An interesting example is provided in that report that contrasts a particular enumerator (a retired Air Force officer) who would knock loudly on the door and always announce in a clear loud voice: "United States Federal Government, Census Bureau!" with others who took a more informal approach. Whereas people could clearly be heard to be inside and yet refused to open the door for other enumerators, there was not a single case of Russian respondents not opening the door for him. After having announced himself, he would then say his name and bring his badge closer for the respondent to see. This imperative approach was observed to have a comparable effect in securing access from other Russian respondents as well. In the analysis provided in that individual report such responses are viewed as reflecting a form of social conditioning about how government authority should be reacted to that may differentiate this population from that of other communities observed.

However, while an initial authoritative framing proved effective in securing initial access, the research team also found that maintaining access and securing needed information often appeared to benefit from the enumerator efforts to establish personal contact and demonstrate personal interest in the respondent during the course of the interview in culturally recognizable ways. Doing this often required deviation from prescribed protocol.

Examples highlighted by the team included cases in which an enumerator showed a genuine interest in the welfare of the respondent and promised to call her later in order to give needed contact information; as well as a case of a male enumerator asking a respondent about her injured arm and showing a genuine concern about the woman being home alone and not having house help. His suggestion to contact a few possible people suitable for the job appeared to visibly warmed up the interaction and the interview moved inside the house. In the Russian cultural context such expressions of care and sympathy tend to be reserved for in-group members. Thus breaking with the officially protocol in these cases is likely to have helped establish a closer

relationship with the respondents and appeared to have promoted more effective communication during the CIE.

In sum, the bilingual enumerators that our field teams observed often made use of communicative conventions that are appropriate to the language community which could put non-English speaking respondents at ease and could facilitate the interview process. This tacit knowledge of cultural norms in communication appeared to play an important role in engaging respondents of the target language. Table 5 summarizes some communicative strategies used in interviews that the teams noted as seeming successful in engaging non-English speaking respondents—based upon a combination of their observations and debriefing interviews.

Table 5. Communicative conventions often deployed by bilingual enumerators in each language group

Language group	**Communicative conventions used in interviews**
Arabic	The interview was framed as a social visit to build trust, intimacy, and familiarity, with the enumerator using terms of address like "friend" or "uncle."
Chinese	Enumerators signaled respect and politeness through other-elevation and self-denigration linguistic features, invoking in-group connections, or repetition, repeating the respondents' answers at almost every turn.
Korean	Honorifics and respectful terms of address (such as "teacher" and "grandmother") were well received; less-fluent enumerators would also position themselves as "learners" and respondents as "teachers."
Portuguese	Enumerators tried to achieve connections by employing a casual, intimate conversational style and initiating personal or current topics. They also took a "supplicant" approach.
Russian	To encourage participation, enumerators emphasized authority and the legal requirements of the census.
Spanish	Enumerators emphasized indirectness, informality, and respect, preempting respondents' concerns about the confidentiality of the census.
Vietnamese	Enumerators took age, sex, and social status into account and used a range of honorifics, often being more polite than they might typically be. Some enumerators also used culturally-appropriate jokes.

5.1.3 Social role negotiation: Sex/age

Another factor that also seemed to affect the framing process and also the negotiation of access were culturally-defined social roles. The form of social role that our field teams observed most often as having some noticeable impact on negotiating access and on the information gathering process was sex.

5.1.3.1 Sex

Sex has long been acknowledged to bear some significant impact in interviewer-respondent interaction in survey interviews. In this study, while all language teams observed the effect of sex to some degree, the role of sex in affecting the course of social interaction in the CIE was most noticeable in the Arabic, Portuguese, and Russian communities.

Arabic: The Arabic research team noticed the centrality of sex in social interaction in their field observation. Thus the sex of respondents appeared to significantly inhibit access, such as in one observed case where a Lebanese woman said she would not engage in the NRFU interview until her husband returned home. This effect seemed even more pronounced in Yemeni households. Women from the Yemeni community seemed particularly afraid and fearful, were generally reluctant, and refused to talk to the enumerator. They typically told the enumerator to return when husband was home, or they called their husband so the enumerator could talk to him on the phone, or had a child answer the enumeration questions. The Arabic team also reported that female enumerators appeared to establish rapport more easily with all Arabic-speaking respondents, and particularly so with women. Thus a male team member of the field research team noted that when he accompanied the female enumerator, she tended to have little trouble convincing respondents to participate in the NRFU interview. However when he accompanied a male enumerator, there were many more instances when the respondent would not participate.

Portuguese: In the Portuguese speaking community, sex also appeared to be a factor in negotiating access and mitigating hostility. However, its effects differed significantly from those in the Arabic community since in the Portuguese case women respondents were generally far more involved in the CIE and friendly than Portuguese men. When both sexes were in the household it was common to obtain collective answers, but if the husband was alone in the house, he would complain about the census questions all the time, and often did not know certain pieces of information (e.g., date of birth of a child). Enumerators for this group judged that interviews were much easier to complete successfully and accurately when wives were at home. The sex of the enumerators could also have an effect in this community. Most of the Portuguese-speaking enumerators were young females and in more traditional households it would have been inappropriate for a husband to dedicate individualized attention to a young female without the wife's presence. Hence, it was observed that even when husbands answered questions, the wives preferred to be present and actively participating in the interview process when the enumerator was female.

Sex (of both enumerator and respondent) also seemed to affect the allocation of time and space for the interview. In Portuguese speaking households the majority of the interviews took place inside the home, namely: living room, dining room, and kitchen. Women commonly invited enumerators (when they were female) into their domestic spaces where most of the interviews took place at times while they were cooking, cleaning, or taking care of children. This directly affected the interview process, since when enumerators were invited in, they had more time to ask questions, correct mistakes, and review answers.

Russian: Perhaps the most notable sex effect in the Russian-speaking context was that male respondents seemed to display a sense of being considerably more comfortable with female enumerators than with male enumerators. The interaction effect of sex is less clear for Russian

women, who appeared to be almost equally uncomfortable with male and with female enumerators at the beginning and end of the interview, but who grew somewhat more comfortable with male enumerators over time than with female enumerators. While further study and analysis of this is warranted, the Russian team noted that in Russian social contexts male dominance is likely to be more pronounced and expected, by men and women alike, than in an Anglo-American context. Russian women are also not used to being friendly with other women whom they have never met before (Isurin et al., 2012).

5.1.3.2 Age

The field teams reported limited evidence that age, or more precisely the differences in age between NRFU interviewers and their respondents, was a factor that had bearing on the negotiation and maintenance of access, and more generally on the course of social interaction within the CIE. Much like sex, the ways in which age differences between actors inform expectations about appropriate roles, social conduct, and communicative conventions are culturally-specific. As the research teams observed it, those NRFU interviewers who understood this as it pertained to the community of language of their respondents seemed generally more adept at both pre-empting potential interactional pitfalls that could emerge from interviewer/respondent age differences and also at exploiting those differences to their advantage in terms of securing access, maintaining rapport, and soliciting desired information.

For example, age is an important aspect of linguistic code itself in the Korean and Vietnamese cases when it comes to the effective navigation of the honorifics system. However, in almost all of the communities of language the teams observed that enumerators accounted for age when choosing appropriate communicative conventions to utilize with their respondents. This might prove particularly important in communities in which significant segments of the non-English speaking population were themselves age-selective, such as in the case of subsets of more elderly respondents among the Russian and (continental) Portuguese populations. In both of these situations younger enumerators who showed culturally-appropriate age deference seemed to be rewarded with better access. Culturally-savvy enumerators in the Korean and Spanish-speaking contexts also proved capable of exploiting age differences with some of their respondents to good effect, albeit from almost diametrically opposite positions: thus younger Korean-American enumerators were often able to turn their limited Korean fluency into an asset by casting the CIE as a form of didactic encounter in which more elderly (and fluent) respondents were cast as their "instructors"; whereas in the Spanish-speaking context the most effective enumerator was an elderly woman who was able to capitalize on culturally-specific notions of respect to assuage doubts about the census and to secure access and greater respondent collaboration.

5.1.4 Linguistic fluency

A final factor that had an observable impact on CIE framing but also broader independent impact on access and the success of the census interview as a form of social interaction was the linguistic fluency of the enumerators. The enumerators' linguistic fluency mattered in two respects: first with respect to their competence in their own target language or sub-dialect; and

second in terms of their interaction with respondents from the same target language who spoke in another dialect.

Enumerators' linguistic competence in their own target language or sub-dialect was observed to have a direct impact on how non-English speaking respondents reacted to the NRFU interviewing process. Although a simple "hi" in the target language in Korean language community could open the door for the enumerator, for other language communities, the ability to speak the target language seemed to be an important asset on which enumerators relied to gain access to respondents who were the speakers of the target language. In immigrant communities, language plays a central and pivotal role in identity formation and identity claim. An enumerator's ability to speak the target language thus can help closes the communication gap, and signal that he/she is a community member. This can facilitate enumerator access to the community. As has already been alluded to in some cases (notably the Korean one) some enumerators did not have full competence in the target language, and yet the mere fact that the enumerator had some degree of language proficiency in the target language and was making an effort to communicate in the target language seemed to positively affected their efforts to secure access and obtain information from monolingual Korean-speaking respondents.

However, in other situations, lower levels of enumerator linguistic fluency and meta-communicative competence, or dialectical differences with respondents had less salutary effects on access and information transmission. Among the seven language teams, four of them (Arabic, Chinese, Portuguese, and Spanish) reported that they encountered varying degrees of challenge associated with dialects, exhibited in spoken and written communication. Thus within these larger communities of language there existed another level of linguistic barrier: that is, the dialect differences among speakers of the same speech community, which could influence both interaction and written communication.

One case in point is the Chinese community. There were four main groups of Chinese-speaking populations residing in the U.S. (Wang, 2007): second or third generation of early Chinese immigrants, Hong Kong-born, Taiwan-born, and Mainland China-born immigrants. The first three groups used to be the dominant Chinese speakers in the U.S. As early Chinese immigrants mainly came from Cantonese-speaking regions, and Hong Kong-born immigrants were speakers of Cantonese, Cantonese was the main language spoken in the Chinese Diaspora until two decades ago. In the last two decades, the Mainland China-born immigrant population increased. At the same time, the Taiwan-born immigrants aged, and the Hong Kong-born immigrants leveled out. This changed the language situation of the Chinese Diaspora in the U.S.

Most monolingual Chinese speakers observed by the Chinese team were from Mainland China, and were speakers of another Chinese dialect: Fujian (Min Nan) dialect. But they all understood and spoke Mandarin, the national standard language of China. Of the 18 enumerators that the Chinese team accompanied in the field in three different areas, 12 of whom were Chinese speakers. Of these, six were from mainland China, two from Taiwan, one from Hong Kong, one from Vietnam, and two were American-born Chinese. All of them spoke Mandarin. The Hong Kong and American-born Chinese were native speakers of Cantonese, but they had conversation competence in Mandarin. As a result, there was no obvious communication problem between

Chinese respondents and enumerators at the onset of the NRFU interview. But the dialectal differences exhibited challenges later in the interview process in that there was a lack of knowledge of the mainland Chinese Romanization system (*pinyin*) on the part of Taiwan, Hong Kong, and overseas Chinese enumerators. The Mainland Chinese used a different Romanization system from that in Taiwan, Hong Kong, and overseas Chinese communities to spell names in English. In several cases the spelling of names was complicated by this issue because the enumerators had a hard time spelling the names in the way that the Mainland Chinese respondents would spell their names. This caused some confusion and uneasiness on the part of both the respondent and enumerator.

In the case of the Arabic community, dialect differences also had some influence on interaction. The Arab-American enumerators observed during the fieldwork varied in their language fluency and thus in both their level of comfort with translating "on-the-fly" and with coping with Arabic-speakers of other dialects. Some spoke both modern standard Arabic as well as their national variety of Arabic. Others spoke only the colloquial dialect of their national origin. When the Arab-American enumerator did not have the skill of modern standard Arabic (which would have signified being educated in the Arabic language), but of a dialect different from that of the respondent, it influenced the interaction -- particularly so in cases where the respondent also only spoke colloquial Arabic of their national origin. Thus, in one particular case that involved an enumerator with Iraqi national origins, whose speaking ability did not include modern standard Arabic, field notes suggest that the enumerator with a command of the colloquial Iraqi dialect conversed with far more confidence when the respondent spoke the Iraqi dialect.

The field research team also noted specific occasions in which respondents indicated they felt more comfortable when the interview occurred in their specific Arabic dialect. Consider the following data from summary notes:

> The respondent spoke Arabic only, Lebanese dialect. Iraqi enumerator spoke half in Arabic, half English. The enumerator gets nervous about her Arabic when it is not Iraqi. The respondent seemed more comfortable after the researcher team member spoke to her in Lebanese dialect.

Another dialectal challenge was observed with heritage speakers of select target languages. Heritage speakers refer to those who have no formal education in the target language and have learned oral proficiency in the target language from their parents and community members with limited direct contact with speakers of the target language. Typically they speak English fluently and in most of their daily activities. They only speak the target language with family members or at home. In many cases, they only speak a certain dialect of the target language that their parents spoke at home and they do not have the knowledge of the standard form of the target language, and much less ability to discern other dialects of the same language. The challenge this issue presented in gaining access to respondents is that most heritage speakers of the target language have limited linguistic repertoire and limited reading and writing proficiency in the target language. It is challenging for them to converse freely in the target language on a variety of topics.

This challenge was most noticeable in this study in the case of the Portuguese community. The Portuguese research team reported that of all the observed NRFU enumerators who spoke Portuguese, only 4 out of 13 spoke a native standard variety of Portuguese and had obtained some secondary formal education in Portuguese before migrating to the U.S. The majority of enumerators were Heritage Learners of Portuguese (HLP), with limited direct contact with standard Portuguese from Portugal, Brazil, Cape Verde or elsewhere. When HLP speaking enumerators came into contact with speakers of other Portuguese variants, namely from Brazil, communication proved to be much more difficult. For the most part Brazilians in New England are from the interior of the state of Minas Gerais, and are not (like most HLP speakers) fluent in English. The differences, for instance between Portuguese from Portugal and Portuguese from Brazil, are greater at the colloquial oral level and diminish at a more standard level. These differences and their impact were also rendered obvious in those instances when respondents from Brazil switched to English (if they spoke English) because they could not understand this regional oral dialect of Portuguese. In addition, most enumerators had oral fluency in São Miguel Island Heritage Portuguese, but extremely poor ability to read and write any standard variety of Portuguese. This was obvious when enumerators had to leave written census notes stating that they would return and did not know how to spell in Portuguese.

5.1.5 Summary

Gaining and maintaining access to respondents is the first challenge that enumerators faced when they were out in the field to conduct NRFU interviews with non-English speaking households. This field research has identified some key factors that appeared to affect non-English speaking respondents' framing of the CIE, and the strategies that enumerators used to gain and maintain access to non-English speaking respondents. These factors include: (1) identity/ethnicity, which signals "in-groupness" that bridges the gap between two strangers; (2) use of culturally appropriate strategies to maintain an effective social interaction; (3) successful negotiation of social role that was brought about by sex and age; and (4) the role of linguistic fluency for gaining access to respondents. While these are important factors affecting securing and maintaining access to respondents of the seven language communities, the analysis points out the uniqueness of how these factors played out in each language community. This finding bears significant implication for the Census Bureau in its design and implementation of strategies to enumerate immigrant populations that are from various countries of origin and that speak various languages.

5.2 Forms of non-equivalency: Conceptual and meta-communicative

5.2.1 Four kinds of non-equivalency problems

The seven field studies revealed four kinds of problems with some of the questions on the census form (see Appendix D and E for the 2010 Census NRFU questionnaire and 2010 Census NRFU Information Sheet) even when these were translated into the native language of non-English speaking respondents:

1. *lack of conceptual equivalency* between the ideas invoked by certain English terms and the terms available or used in their stead in other languages;
2. *discursive dissonance,* involving situations in which the structuring and terminology of the utterance tended to suggest a question that was a somewhat different one than the same question when it was posed in English;
3. *inadvertent social affront***,** involving situations in which the question itself proved provocative or offensive to members of a particular community of language in a manner that would typically not be the case for American English speakers;
4. *ulterior signaling,* involving situations in which the particular terminology and structure of the question inadvertently raised respondent suspicions that the question was being asked in order to serve some ulterior (usually assumed by the respondents to be undesirable) motive.

The first of these issues involved situations in which there was a lack of, or highly imperfect, *conceptual equivalency* between the ideas invoked by certain English terms and the terms available or used in their stead in other languages. Problems arising from a lack of conceptual equivalency were particularly pronounced on the questions about "ethnicity" (Hispanic origin) and "race," occurring for in all but two of the language groups (and only not occurring in the other two cases because these questions were largely omitted by the NRFU interviewers-albeit for reasons other than that of conceptual non-equivalence). In two communities (Arabic and Russian) conceptual equivalency issues also emerged around the question of middle name, in two communities (Russian and Portuguese) these issues arose around the home ownership/rental question, and in one community (Korean) conceptual non-equivalency issues emerged around the "age" question. Finally, conceptual non-equivalency interacted with some of the other issues listed below to generate difficulties in the April 1 location/residency question in at least three of the communities of language (Arabic, Spanish, and Russian). Most conceptual equivalency issues were quite particular to each community of language (and in at least one case -- Portuguese speakers -- differentiated significantly within one).

All three of the other issues involved a lack of **"**meta-communicative**"** (Briggs, 1986) equivalency. This refers to differences between communicative conventions that tend to frame and inform the meaning of utterances in interaction between native English-speakers in the

American context and those that inform non-English speakers who have been socialized in another socio-cultural milieu.[18]

The term "discursive dissonance" is used here to refer to one of these meta-communicative (non) equivalency issues, namely: situations in which the structuring and terminology of the utterance tended to suggest a question that was a somewhat different one than the same question when it was posed in English. This was observed to be as a factor that contributed to frequent misinterpretations of the April 1 question in the Arabic and Spanish-speaking communities as is discussed below.

Another meta-communicative (non) equivalency issue was that of "inadvertent social affront," involving situations in which the question itself proved provocative or offensive to members of a particular community of language in a manner that would typically not be the case for American English-speakers. This issue affected responses -- but even more so NRFU enumerator interviewing strategies -- in several communities when it came to the "sex" question. This factor also added to the challenges caused by conceptual non-equivalency in the "Race" question for certain sub-sets of the Spanish-speaking and Portuguese-speaking communities. Finally it also underwrote a very specific problem (with asking about whether any children in the household were adopted) in the case of Korean respondents.

A final meta-communicative (non) equivalency issue was that of "ulterior signaling" involving situations in which the particular terminology and structure of the question inadvertently raised respondent suspicions that the question was being asked in order to serve some ulterior (usually assumed by the respondents to be undesirable) motive or in order to provide indirect information about something else they did not wish to be revealed. Often in some combination with the other types of issues described above this issue proved to be a factor that affected the April 1, 2010 residency question for significant subsets of the Arabic, Russian, Spanish, and Portuguese populations in particular. The requests for date of birth and telephone numbers also were affected by this issue in the Russian, Spanish, Korean, and Portuguese-speaking communities.

Together these four factors clearly affected not only how non-English speaking respondents understood and answered a number of the questions that were posed to them, but also the strategies their bilingual interviewers ultimately deployed in order to solicit the information that the census questions were meant to elicit.

[18] Meta-communicative factors, though almost entirely non-linguistic, play a central role in giving specific meaning to linguistic utterances and thus are indispensable to communication. Inasmuch as such understandings tend to be specific to communities of language (and often are even further specified within their social sub-groups), meta-communicative equivalency is no less of an empirical question than that of linguistic equivalency in interactional contexts involving protagonists from different communities of language. In short the question is never merely whether a specific term in one language means the same in its translated form (i.e. does the term "residencia" in Spanish imply the same ideas as does the term "residence" in English) but always also whether how the question is asked (i.e. by whom, in what manner, under what circumstances, in what form of interaction) has comparable effect in terms of the conveyance of meaning. Specific examples of different types of problems in meta-communicative equivalency are discussed in detail throughout the rest of this report.

All these issues appeared to be even more pronounced when translation occurred on the fly. However, even the use of language aid materials and/or census forms in the respective languages did not always appear to effectively mitigate their impact.

5.2.2 Problematic census questions for respondents

5.2.2.1 Ethnicity and "race"

"Race" and "ethnicity" are forms of social categorization that have developed under specific socio-historical circumstances that are largely unique to the American experience. The meanings of these categories reflect and embody that uniqueness. Immigrants to this country learn and appropriate these categories to quite varying degrees. In several of the communities of language observed in this study it was readily apparent that the answers provided by (predominantly) monolingual immigrants conformed far more closely to the culturally-constructed economies of social identity prevalent in their respective countries of origin than to the prevalent American one. [19]

The race question appeared to be problematic and ambiguous for the majority of Russian speaking respondents observed by our Russian field team, with 74 percent of the respondents showing confusion over this question. This confusion can be explained in large part by relating the categories suggested in the question to the economy of identity categories in which most Russian-speaking respondents were socialized. As the individual report discusses in more detail, immigrants from Russia have not been exposed to a concept of "race" comparable to the one that operates in America, nor did they construct their identity with such a concept.

However, those born in the Union of Soviet Socialist Republics (USSR) did have a "nationality" (that conceptually conforms loosely if not exactly to American notions of "ethnicity") listed in their passports. Thus ethnic Russians would be listed as Russians, Ukrainians as Ukrainians, and Jews as Jews. In the USSR this concept of nationality was imposed on citizens from birth and often precluded any form of negotiation on the individual's in terms of determining one's own identity (Isurin, 2011). This assignment of "nationality" both constituted, and contributed to the stigmatization of, minorities, such as Russian Jews (who would be listed as "Jewish" rather than "Russian"). In this respect it is important to note that the Russian Diaspora in the U.S. is predominantly Jewish and that experiences of stigmatization played a significant role in motivating and enabling their emigration from Russia in the first place.

[19] It bears noting that race has always presented as one of the most difficult and problematic questions for respondents in census interviews (e.g., Bates et al. 2006, Gerber and Crowley 2005, Childs et al., 2011). While there are and have been a variety of reasons for that variance, the most of it has not typically been attributed to the fact that respondents actually have entirely different social categories in mind than those presented to them in the questionnaire. Moreover, that portion of the native-born American population for whom this is the case has generally been a small minority. This contrasts dramatically with non-English speaking populations who are far more likely to remain tethered to entirely different categorization schemes from their home societies embodied in their mother-tongues.

In short, the question of "race" on the census form proved to be far from clear to most Russian-speaking respondents, especially those older ones with no proficiency in English. This question was interpreted in different ways by respondents. In some cases respondents chose to answer this question by denoting themselves as "Russian." A significant number opted instead to answer the race question by stating that they were "Jewish" rather than as Russian. Over 70 percent of respondents expressed that they were not satisfied with the limited choices of answers provided for the question of race, Most of these denoted their race in terms of their "nationality" (as per terms of identity operating in Russian society, i.e., Belorussian, Russian, Ukranian etc.). Finally a more limited number of younger and middle aged respondents identified as "white."

In the Arabic-language context the Hispanic origin question was variously confused with language spoken or, alternatively, with national origin -- and sometimes subsequently first as one and then the other as in the following case:

> E: "Now, are you Hispanic [stated in English], Latino [stated in English], Spanish [Espagne in Arabic].
> R: "French."
> E: "No, not the language you speak, for example, what's your origin?"
> R: "Lebanese."
>
> After the Enumerator asked the Hispanic origin ethnicity question, he follows up by asking them to look at the response card (which is in English, and NRFU respondent cannot read English): " It says here, look at List C. Are you from Mexican, Puerto Rican origin from your grandparents?"
> R: "No. No. Lebanese. The father and mother are Lebanese."

The question about race proved to be even more confounding because in the Arabic language there is no term equivalent to (American) "race" that defines individuals largely through reference to the physiological characteristic of skin color. Consequently, both Arabic-speaking enumerators translating on the fly and monolingual Arabic-speaking respondents often chose to utilize a concept of "(national) origin" in lieu of "race." Consequently when respondents had already provided a "national origin" response to the Hispanic origin question, the race question was generally skipped altogether (in principle because it would be redundant to ask about "origin" again).

It is worth noting that even among Arab-Americans born and raised in the U.S. studies have shown ambivalence over the extent to which their concept of self "fits" within the predominant American racial schema. Thus though Arab Americans fought to legally be considered White at the turn of the 20th century when citizenship depended on a "white" racial status (Gualtieri, 2001), scholarly work on Arab American identity suggests that Arab Americans increasingly do not identify as such (Ajrouch, 2004; Samhan, 1999). The excerpt below demonstrates how this ambiguity played out in one observed instance in this field study in which a bilingual Arab-American enumerator was observed attempting to explain what was meant by the racial classification questions:

> Enumerator did not attempt to use an Arabic word to ask about racial classification. Instead she asked, "Now what do you consider yourself? White? Asian? Hawaiian? Japanese? [Enumerator laughs after this question]. NRFU respondent inquired, "What does that mean? I didn't understand." The enumerator attempted to explain using herself as a reference point, "Like….uh….we're Arab, but they all consider us white. But there are people who like to say, for example, they say they are white, but Lebanese or Iraqi, or- you know what I mean? So what do you consider yourself?" NRFU respondent answered, "Lebanese."

The ethnicity and race questions were also particularly problematic for Portuguese speakers, in some respects in shared ways common to all four of the major subsets of this community of language (Azorean, Cape Verdean, Brazilian, and continental Portuguese) and in other respects in ways particular to those a specific sub-group. A first "conceptual non-equivalency" problem arose for all Portuguese speakers with the "Hispanic origin" question. While "Latino" in the U.S. refers to ethnicity, in the Portuguese language Latino is translated into a word that refers first and foremost to the "Latin" language. This is also a term that does not readily signal ethnicity per se, but a broader cultural and linguistic area largely defined by the remnants of the Roman Empire and its derived Latin languages (which obviously includes Portugal, but also Spain and Italy). This is obviously a very different referent from that intended by the census question.

As the field team observed, questions in the NRFU interview consistently arose about whether or not "Portuguese" speakers qualified as "Latino." Socio-political dynamics within this community of language played an additional role in affecting responses to this question. Thus, in many areas with a high-density of Portuguese-speakers, organizations affiliated with this population had organized a campaign that encouraged all Portuguese-speakers to refrain from checking "Latino/Hispanic" on the census form. For some Portuguese-speakers this effort was motivated by efforts to affirm a separate "Portuguese" identity. A similar if somewhat differently motivated campaign was also organized within the Cape Verdean community in an effort to affirm an even more distinct "Cape Verdean" identity -- cast in juxtaposition to (and thus separate from) both "Hispanic" and "Portuguese," but also as an alternative racial identity that reflects understandings of race far more in tune with categories that operate in Cape Verde than with those that predominate in the U.S.

A lack of conceptual equivalency between enumerators' cultural understandings about race (largely shaped by their American upbringing and as reflected in the structure of the census question itself) and respondents own cultural perception about race (largely shaped by their cultures of origin), generated considerable confusion for all categories of Portuguese-speakers.

Racial classification throughout the Lusophone world is perhaps one of the most complex ideologically charged subject matters involving contestation, dissonance, and political manipulation by citizens, migrants as well as post-metropolitan and postcolonial states alike (Fikes, 2009). Despite considerable variation in how race is constructed among different Portuguese-speaking societies, studies of race relations in Brazil, Portugal, and Lusophone Africa (including Cape Verde and its diaspora) show that "blackness" is associated with

subordination, exclusion, repression, and lower social status broadly throughout the Portuguese-speaking world (Fikes, 2009; Caldwell, 2007; Twine, 1998). Racial classification systems -- despite variations in these different Lusophone contexts -- all generally invert the logic found in the Anglophone world (that posits an implicit "one drop rule" for assigning "blackness") by positing the possibility of a "one drop rule" for claiming "whiteness" instead. Very different histories of racial relations throughout the Lusophone world have also generated a far more varied, fluid, and distinctly non-binary continuum of racial categories (particularly in Brazil) for which there is simply no direct translation into English. That is, there are multiple linguistic categories for racial mixture to demarcate subjects from identifying in neither black nor white terms, but rather along a complex continuum that is arrayed between these two poles. Moreover phenotype and kinship have far less singular importance in these social assignments than they do in the U.S. context. Thus, even within the same Brazilian or Cape Verdean family there may be several categories for indexing and assigning race in different ways to different members.

While Brazilian migrants to the U.S. were initially predominantly white (particularly during the 1980's), their racial configuration has becoming increasingly plural-and with that so have the categories of race these immigrants bring with them. The situation is complicated further by the fact that Brazilians confront an American society that seeks to re-ascribe them within its own ethnic and racial category schemes. Thus some Brazilians find themselves ascribed in racial terms that reflect American racial binaries, while also/or confronting pressures to "Latinize" their ethnicity in Hispanic terms (because Brazil is viewed as part of "Latin America"), an identity that holds little salience and in fact contravenes a sense of Brazilian exceptionalism within Latin America itself. Consequently the Brazilians who responded to this question often responded with a great deal of uncertainty. Many who saw themselves as "whites" (as calculated within the Brazilian racial spectrum, which gives significant salience to the "whitening" power of economic class) demonstrated uncertainty about whether Brazilian "whiteness" corresponded to American conception of "whiteness." For example, one respondent from Rio de Janeiro (a graduate student living in Massachusetts) shared his genealogy up to the most remote European great-great grandparents, one side from Italy, the other from Germany in an effort to help the enumerator discern if that made him "white" in the U.S. He explained "in Brazil I am white for sure, but here it's hard to tell". In the end all the Brazilian respondents observed ultimately resorted to their nationality in order to respond to the race question, and as a result were recorded as "some other race: Brazilian."

Cape Verdeans who tend to be classified by most Americans as "black," also usually answered the race question by stating that they were "some other race: Cape Verdean" (although instances of older Cape Verdeans who spoke little English answering that they were "Cape Verdean and Portuguese" were also found). Only one Cape Verdean young woman answered that she was "black." These findings reflect the historical arguments and contestations regarding race and ethnicity that have been documented within the larger Cape Verdean community in the U.S. (Halter, 1993; Sanchez, 2005) as well as in Cape Verde itself.

The Portuguese colonial legacy, which set the Cape Verde Islands apart from the rest of Africa by mythologizing the archipelago as a racially mixed paradise (Meintel, 1984) have influenced the ways in which identity has come to be constructed by its residents and emigrants alike. In

post-colonial Cape Verde race is seen through a "Creole continuum" whereby dichotomizing color categories are avoided (Rodrigues, 2003; 2005). This has happened at the cultural level as well as at the level of government policy. Since independence from Portugal in 1975, the Cape Verdean government abolished racial categorizing in its own census and all official policies in an effort to do away with the colonial racial legacy. Furthermore, local cultural discourse about race follows the same concern to "de-racialize" by avoiding attributing or naming racial categories during social interaction. The great majority of the population subscribes to the idea that all are of "Creole origin" thus casting "Cape Verdeaness" as a homogeneous "de-racialized" identity, distinct from "white" or "black." Naming someone "black" can be considered an insult (which is often used vis-à-vis mainland African migrants residing in Cape Verde). Furthermore, white or "branco" in the Cape Verdean cultural context does not necessarily denote skin tone, so much as it does high status (a feature shared to some extent with Brazilian racial categorization logics). For example many people of dark skin tone can be classified as "gente branco" (white people) if they have a prestigious professional position, high standing family name, reasonable income and property. Hence, the translation of white to "branco" (white) cannot be taken at face value in the Cape Verdean case.

This concern with distinguishing their identity from "blackness" has also played a significant role in how Cape Verdean immigrants to the U.S. have confronted and challenged a binary American racial logic that would assign them as "black." Historically, this involved self-ascription as "Portuguese" (Halter, 1993) such that by and large in the context of the older New Bedford Cape Verdean community self-categorizing as "black" is extremely uncommon while "Portuguese" has been fairly common. However, younger generations of Cape Verdeans and the children of older emigrants have, in the postcolonial era of Cape Verdean independence, increasingly contested such a conflation, often seeking to reaffirm a distinctive identity that is not subsumed under that of their former colonial overlord (i.e., Portugal). In part these cultural conceptions, and ongoing deliberations, about identity explain why so many Cape Verdeans were upset when the category Cape Verdean was removed from this year's census; as it also does their determination to be classified as "some other race: Cape Verdean." Cape Verdeaness is thus increasingly constructed by de-racializing identity and emphasizing the uniqueness of a shared Cape Verdean history and culture, in this way substituting "nation" in lieu "race" (Halter, 1993; Pires-Hester, 1999).

Nationality was also interchanged for race in all the households where respondents had been born in Portugal (continent and Azores alike). In all such cases observed they reported to be "Portuguese" and enumerators checked them under "some other race:" Portuguese. The only difference in responses usually had to do with the fact that many also checked "white."

In all of these Portuguese language groups, children of mixed race marriages proved particularly difficult for respondents to racially assign. If children had been born in the U.S., respondents generally tended to assign them as "white" even if they [the parents] had classified themselves differently. In other words, being born in the U.S. was often racialized into "whiteness" by Portuguese-speaking respondents. Some particularly ironic and even humorous cases were observed in this respect. In one instance with a Portuguese immigrant, one mother commented "my children are all white, and my boy is as white as president Obama." Another older

Portuguese lady in a Massachusetts area reported that "her legs were darker than her arms," but that "most likely she was white." In two instances, respondents said they thought they were white but were not totally sure. In yet another case a Colombian-Portuguese ultimately asked the enumerator to figure out his race, because he found it too difficult to figure out himself.

Very similar problems arose with the race question among the Spanish-speakers that the field teams observed. Both the monolingual English and English-Spanish bilingual enumerators consistently directed their respondents to the Spanish Job Aid and asked them to choose a race. Although the majority of the monolingual Spanish respondents were literate they did not know which race to choose because they did not consider themselves one of the races listed on the Spanish Job Aid (White, Black, or Asian). Evidently, taking a cue from the fact that the list also provided "races" that could also be understood as "nationalities" (such as Filipino, Japanese, and Korean) many monolingual Spanish respondents eventually answered this question by listing "some other race: Mexican." Some monolingual Spanish respondents first thought that "race" referred to their skin color which caused confusion since many immigrants from Mexico, Guatemala, El Salvador, and Honduras consider themselves neither "Black" nor "White." Much as in the case of many Portuguese-speakers answers such as "moreno," and "indigenous" reflect the influence of racial categories used in their own countries of origin that are more nuanced and fluid than the far more binary American ones. At the same time answers such as "Mexican-American" and "Hispanic" reflect interactions with American identity typologies as well.

Moreover, much as in the case with Portuguese-speaking respondents several monolingual Spanish respondent mothers with children born in the U.S. listed their children as "White" and those who were born elsewhere were classified as "Other" or "Mexican." These observations reinforce earlier findings by other researchers. The problematic nature of the term "race" on the census form has been thoroughly documented (Amaro and Zambrana, 2000; Grieco and Cassidy, 2001; Prewitt, 2005; Schmidley and Cresce, n.d.). This in part stems from a fact concluded by Bates, Martin, DeMaio, and de la Puente (2006) that:

> …the current classifications represent a set of categories which probably is not congruent with race classifications used by a growing segment of the U.S. population (Hispanics). The mixture of race and national origin categories confuses some persons about the intent of the race question, and some persons do not find a category with which to identify (p. 6).

Problems of inadvertent social affront arose from the fact that, in Spanish, the term "race" ("raza") refers to "animal breeds." Among the English-Spanish bilingual population of the U.S., raza has gained a new definition and includes that of Mexican-American ethnic origin. But among monolingual Spanish speakers who were recent immigrants to the U.S., the term "raza" still carries its original meaning. This explains situations in which monolingual Spanish respondents took slight at the question, in one case a respondent stating angrily to an English-Spanish bilingual enumerator: ¡Qué! ¿Soy un perro? – "What, am I a dog?!"

Finally, the categories of "ethnicity" and "race" were not observed to prove as problematic to Chinese-speaking, Vietnamese-speaking, or Korean-speaking respondents. However, this was only because, as the field team observed, enumerators usually did not even ask this question of

those respondents. Rather they tended to simply assume that their Chinese-speaking, Vietnamese-speaking, or Korean-speaking respondents were (obviously) "Chinese," "Vietnamese," or "Korean" respectively and would fill in the answer without posing the question at all. Alternatively on the few occasions in which they did ask the question it was almost always posed in a format that merely solicited (and inevitably got) respondent affirmation (i.e., "You are Chinese, right?"; "You are Vietnamese, not Spanish, right?").

5.2.2.2 Time/date (April 1)

In the Spanish-speaking context the question about whether they were "living" in a house on a specific day appeared to be somewhat incongruent with a cultural idea that "living" in a household involves the relatively long-term. The responses of some monolingual Spanish-speaking respondents (such as the one quoted below) thus sometimes demonstrated a certain degree of discursive dissonance, in which they (mis) interpreted this question as one about when they had taken up permanent residence at the location in question:

R: *He estado aquí desde noviembre del año pasado, noviembre*. (I have been living here since November of last year, November).
E: November? 2009?
R: *Sí*, (yes)
E: How about April 1? Were you living here on April 1?
R: *No, noviembre*. (No, November).
E: Okay, yes.

The translation of the term "residence" into Spanish (and in Portuguese) also fell prey to a certain degree of conceptual non-equivalency in that in both of these languages the translated term tends to be used primarily to refer to one's nationality (of legal residence) and only secondarily to the specific location of habitation.

Residence location on April 1 was a question that required even more extensive clarification by the interviewer for many Arabic-speaking respondents. When asked if living at a residence on April 1, Arabic-speaking respondents also often interpreted the question as one about the length of time at which they had lived in the location in question and attempting to mentally go back to the actual date they moved into the residence. For instance, the following monolingual Arabic respondent asked the enumerator to be patient as he thought about when he moved in (revealing how he (mis)interpreted the question in the first place):

> E: Were you living here on April 1?
> R: No
> E: April 1?
> R: Extend your patience (Be patient or have patience).
> E: I mean how long have you been here?
> R: Have patience. I entered here in [October].
> E: [October].

R: Since the tenth month.
E: [Yeah, OK]
R: Since the 9^{th}-10^{th} month.

An additional effect of this discursive dissonance in the Arabic cultural context, which made asking about residency at one date in particular seemed odd, especially if one had been living there before that date, was its ulterior signaling. Such an unconventional invocation of a particular date thus would tend to cue Arabic-speaking NRFU respondents that some event, issue, or episode was associated with the stated date and thus of ultimate interest to the interviewer. As a result, it appeared to ignite strategies to dance around the question ("have patience"), or deny any association with it, at least until the event could be identified and its implications better understood. Russian respondents were observed to react in a very similar (suspicious) way to this same question, because they did not seem to understand the reason for the invocation of a particular date. Although producing less anxiety than evidenced in the Russian and Arabic cases, this question proved to be highly confusing to many Vietnamese respondents as well-who like Arabic speakers understood the question to be signaling a date of some significance and prompting them to focus on discovering that significance rather than on the actual date. When re-directed to the date itself this led the Vietnamese respondents to "hyper-focus" on the date -- in the sense of trying to determine where exactly they had been on that particular date -- and on whether specific people had been visiting them at home at that time, rather than understanding the question in the more general sense of whether this was their place of habitual residence on that date (regardless of whether they had been visiting someone else on that day or during some portion of it thereof). In all these cases significant additional explanation tended to be required of the enumerators in order to effectively solicit the information sought by the census through this question.

5.2.2.3 Middle name

The concept of middle name can be problematic to many language groups. As documented in prior Census Bureau research, the question asking for middle name was difficult for Spanish respondents (Goerman et al., 2007a; 2007b) and for Chinese respondents (Pan et al., 2005).

The current study demonstrates how that the American concept of middle name is quite different from other cultures and can be difficult to translate or to convey to non-English speaking respondents. For example, names in the Arabic language reflect a patrilineal system where the father is identified as the person responsible for the economic well-being and livelihood of the child (Ajrouch, 1999). As a result, children are known by the father's first and last name. The "middle" name therefore is traditionally the father's first name, regardless of whether the child is male or female. For example, a girl born into the Beydoun family named Rena, whose father's name was Samir, would be known as Rena Samir Beydoun.

During the NRFU enumeration process, the concept of "middle name" (and thus middle initial) thus proved difficult to translate, and was referred to as "name of father." Interestingly, when this question was asked in the English interview, the enumerator requests only the middle initial (as

opposed to an entire name). Hence, there was evidence to suggest that the translatability of the middle name concept proved an issue for the enumerator, perhaps as much as or more than the NRFU respondent.

> Enumerator asked, "do you have a middle name?" NRFU respondent answered, after giving first and last name, "No, this is my real name." Enumerator probed, "I mean is the name of your father on the ID? NRFU respondent responds by stating name of father, but assuring the enumerator it is not written on the ID, "The name of the father is Abed, no its not there."

A few Russian respondents were also confused by the question about their middle name. In Russia people have a first name, last name, and a patronymic (father's name). Patronymics are not the equivalent of a middle name and are dropped by most Russian immigrants. Consequently some of the elderly Russian respondents had trouble understanding this question.

5.2.2.4 Telephone number and date of birth

In the Russian case ulterior signaling also proved to be an issue affecting the date of birth and telephone number questions. Many Russian respondents clearly felt uneasy when being asked about their date of birth and telephone numbers. While providing their names was not considered threatening the question about date of birth did not seem to have a clear rationale for most respondents and thus elicited some suspicion about why it was being asked -- indeed many asked why all this information was needed. While Russians commonly reveal their names when introducing themselves or when being asked about their names, questions about date of birth or telephone numbers are not usually requested in everyday social interactions, especially with strangers. Moreover, the Russian language media in New York has repeatedly warned its listeners about con artists who solicit personal information in order to get access to personal credit cards and bank accounts. Inadvertently, the timing of those warnings coincided with the enumeration process and consequently generated more suspicion on part of the Russian respondents. Notably, somewhat similar concerns about potential fraud were also expressed by a number of Korean respondents when their dates of birth were requested.

It also bears noting that it is not uncommon for Russian immigrants to have immigrated to the U.S. with fabricated documents in which their dates of birth have been changed in order to allow respondents to qualify for social security payments upon their arrival. Together these factors explain the deep level of initial discomfort among Russian respondents in the NRFU interview with requests for this type of personal information.

Similar concerns with legal status were also reported as rendering some Spanish-speaking respondents uncomfortable with the telephone number question.

5.2.2.5 Sex

In virtually all of the communities of language the question about "sex," particularly when asked of the respondent, introduced varying degrees of awkwardness into the NRFU interview process. In Portuguese households this question was actually viewed sometimes as rather insulting. In focus groups enumerators reported that Portuguese men were usually insulted if asked about their masculinity, and sometimes responded by touching their parts and saying sarcastically "let me check." In order to avoid such hostility, or merely awkwardness, enumerators in all of the language groups often omitted this question altogether and simply inferred the answers (see below). Some also reported utilizing humor as an effective way to navigate the problems that could arise from this question.

5.2.2.6 Rent/mortgage/home ownership

The question about rent/ownership also proved confusing to a number of Russian respondents who reported their monthly rent instead of answering with a simple "yes" or "no." Some responded that they did not own the property but that the bank did (meaning that they had a mortgage on the house). One respondent got furious at the question and perceived it as an invasion of his privacy.

Social and historical context may help explain this range of reactions. For the majority of Russian immigrants the very concept of ownership or rent is relatively new. In the USSR there was no private property and people lived in government subsidized housing subject to a monthly fee. The linguistic term *kvartplata* (literally, payment for the apartment), which was often resorted to as a translation by Russian speaking enumerators, is a problematic equivalent for English "rent." Thus elderly Russians in particular could have a struggle with the lexical term that they borrowed from English due to the absence of the corresponding concept in Russian. Cultural differences about how the term "ownership" is operationalized also came into play. Thus, in the minds of most Russians, "owning" a property implies there are no outstanding obligations to any third party. Thus if you still have a mortgage on your house most Russians would consider the bank to still be the "owner."

Although it was not noted as having a significant impact, the mortgage question proved to be a somewhat awkward one in the Portuguese-speaking context, albeit apparently for different reasons than in the Russian one. In Portuguese households this was seen by some as an offensive and intrusive question, particularly by older respondents among whom having a paid-off house is a source of pride. To put this into question can thus be seen as putting their own success and status into question.

5.2.2.7 Vacation home

In some cases, and most particularly the Vietnamese and Chinese ones, these questions were deemed so confusing and irrelevant by the enumerators that they tended to simply be skipped. Or the enumerators just inferred the answer based on their assumption of the situation.

5.2.2.8 Adoption

The question about whether a child was adopted proved to be an awkward and problematic one in the Korean-language context, requiring forms of deviation from the script by enumerators in order to avoid offense (as detailed below). Deeply influenced by Confucian tradition, blood ties have been viewed as essential to a family organization in Korean culture. "Korean families have a clear boundary as to who is 'in' and who is 'out'" (Kim and Ryu, 2005, p. 352). As they explain the term *jip-an* (family) means literally "within the house" and identifies family membership, values, and traditions practiced within a particular family (p. 352). Such a rigid view of family boundaries has made Koreans extremely reluctant to adopt orphaned children (a culturally informed orientation that has led to the infamous image of Korea as a sender of adoptees to foreign countries ever since the Korean War). To even ask if a child is adopted in this socio-cultural context is thus potentially quite offensive.

5.2.2.9 Age

One issue of conceptual non-equivalency emerged that was highly specific to the case of Korean-speakers. In contrast to "American" ages which start from 0 at birth "Korean" ones start from 1 at birth, and then change every New Year's Day, rather than on every specific calendar birthday. This way of reckoning Korean age is a cultural practice rather than an official system but is likely to have affected responses-particularly those of more elderly monolingual respondents since no clarification was provided beforehand by the enumerators that "American" rather than "Korean" ages were being sought.

5.2.2.10 NRFU interviewer strategies for coping with problematic questions

The NRFU interviewers that the field teams observed deployed a range of tactics for coping with the problems of conceptual and meta-communicative non-equivalency in the census questionnaire. All of these tactics involved departure from the established interview script.

Although there was considerable variation among enumerators (and often even among cases or questions by the same enumerators), the primary objective that seemed to guide the choice and deployment of these strategies was the enumerators' desire to obtain the information they understood the census question/questionnaire to be soliciting. Consequently, many of these strategies tended to emphasize the solicitation of forms of information from a respondent that would allow the enumerator to interpret and write down the "right answer," rather than on merely writing down the verbal utterance from a respondent -- especially when the enumerator

believed the question had been misunderstood. This is an important distinction because to a certain degree it can, and in some instances did, appear to result in answers that privileged the interpretation of the enumerator over and above the utterances of the respondent.

This is perhaps most obvious in one of the most prevalent strategies that was deployed by enumerators across most if not all of the communities of language, namely that of totally omitting the question altogether. This strategy was quite commonly deployed by bilingual interviewers on questions about "sex" in virtually all of the communities of language in this study. The awkwardness of this question led many bilingual interviewers to simply infer the sex of particular individuals from the names that had been provided.

Omitting the question altogether was also a particularly prevalent strategy for Korean and Chinese enumerators who usually did not ask the "race" and "Hispanic/ethnicity" question and simply filled in "Chinese" or "Korean" respectively. This also occurred, albeit less often and less consistently, in the Russian and Portuguese-language cases. However, an important difference informed the use of this same strategy in different communities of language. Thus, for example in the Chinese, Vietnamese, and Korean cases, enumerators tended to omit the question simply because the answer was seen as self-evident and they had little doubt that respondents would affirm what they already knew -- not because the answer was deemed likely to be problematic. In the Russian case enumerators filled in the line of nationality simply based on their assumption that if the person speaks Russian he/she must be Russian, thus shortcutting to what they took to be the respondents' most likely framework for interpreting this question (based, as previously detailed, on the concept of "nationality" prevalent in the former USSR).

However, in the Portuguese case in particular a different social dynamic came into play. Thus on one hand enumerators who omitted this question avoided confronting culturally problematic racial and ethnic categories. On the other hand, the fact that the majority of the bilingual enumerators were heritage speakers who had been raised in the U.S. meant that many of them were familiar with -- and to some extent subscribed themselves to American conceptions of race -- which is primarily defined by the dualistic and mutually exclusive divide between black and white. Hence, the field team observed that if a person "appeared" to unambiguously fit the enumerator's own conception of race (as either "black" or "white") they often omitted the question altogether and simply assigned the respondents to those categories as they saw fit. Thus, in the overwhelming majority of NRFU interviews with monolingual Portuguese households observed by the field team, respondents were not given a list of possible combinations for race and ethnicity –these were simply assigned by the enumerator. One of these enumerators admitted that if he saw people who looked white he checked white, if they looked black he checked black and he compared this question to the sex question: "if you are talking to a woman and she is in front of you, do you think it makes sense to ask if she is a woman? The same goes for race."[20]

[20] It is important to note that while the overwhelming majority of NRFU interviewers that the field teams observed were bilingual, in some cases the extent of their fluency and of their meta-communicative competence in their respective languages fell somewhat short of that of their monolingual respondents. This was particularly the case in the case of a number of the Portuguese and Korean enumerators some of who were "heritage speakers" (i.e., the children of native speakers who have been raised in the United States and who did not generally share the fluency of their parents in their parents' native tongues). The fact that heritage-speakers (partially) shared a language with their respondents but had been raised in the U.S., and consequently did not share some of the concepts and

A second strategy sometimes utilized by respondents in lieu of outright omission was to pose the question in an affirmative that omitted most possible responses while highlighting what was deemed the most "likely" or "obvious" response. This strategy was deployed on the same questions and in the same communities as those in which total omission occurred. This strategy is exemplified well in the following Korean cases:

> E: "They are asking if you are Hispanic origin, but for Koreans…" (checking "no" on form without even asking while noting no disapproval from respondent at this act)
>
> E: "For the race, there is an option for Korean. I am checking both of you as Korean" (respondent nods assent)

Similarly Portuguese-speaking enumerators at times also sought to short-circuit racial ambivalence, by asking this question in some variant of the format: "So you are Portuguese, so you are White, right?"

With the exception of some of the bilingual Portuguese enumerators who at times assigned race and ethnicity based on identity ideologies of their own, bilingual enumerators generally sought to cope with challenges of conceptual non-equivalency by locating and using a term in the language of the respondent that had some semblance of overlap in meaning with the English-in-American-social-usage concept, but that was more recognizable to their respondents. Especially in the case of questions about identity (Hispanic origin/ethnicity and race questions) the original meaning in the respondents' language tended to be privileged and preserved in the responses that most enumerators ultimately recorded. Consequently, such responses often reflected logics of social categorization that were rather specific to each community of language (rather than broadly shared with census respondents from other communities of language, American or otherwise) Thus, for example, when enumerators confronted the challenge of conceptual non-equivalency on these questions in the Spanish-speaking community they encouraged the respondents to look through the list and choose what they thought was appropriate. The monolingual English enumerators tended to point to the "Other" response to let the monolingual Spanish respondents know that it was acceptable to use a label not listed. However, the English-Spanish bilingual enumerators were able to understand the monolingual Spanish respondents' confusion and thus to also write down classifications not included on the Spanish Job Aid but that reflect the continuum of quasi-racial identities prevalent in the respondents' specific society of origin (see above, such as *moreno* or *indio*).

Both the monolingual English and English-Spanish bilingual enumerators working with Spanish monolingual respondents were faced with this challenge and they both encouraged the respondents to look through the list and choose what they thought was appropriate. The monolingual English enumerators tended to point to the "Other" response to let the monolingual Spanish respondents know that it was acceptable to use a label not listed.

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communicative conventions that informed the answers provided by their interview subjects, influenced some of their strategies for interpreting responses.

Similarly many of the bilingual Russian enumerators simply chose to replace "race" with the Russian term "nationality," reflecting the logic of Soviet era "nationalities" and/or "religious ethnic heritage (i.e., Jewish)" to which most Russian respondents could more readily relate. A somewhat different "nationality" (that attributable via citizenship in a political nation-state) often became the concept to which Portuguese- and Spanish-language enumerators resorted in their effort to translate the conceptual framework of the Hispanic/Latino question into language that their monolingual respondents could understand. Some Portuguese enumerators also resorted to national identity, basically framed under an abbreviated question: "are you Portuguese, Brazilian, or Cape Verdean?" in order to complement the ascription they had already provided (of "black" or "white") and/or make the "some other race" response more "complete." Nationality (of original political citizenship) was also often the response outcome resulting from the use of the Arabic term "origin" by enumerators in their effort to elicit a response to the Hispanic/ethnicity question, as per the example below:

> Hispanic origin question understood as a language question…e.g., as what language do you speak, when the enumerator asked, "Now, are you Hispanic [stated in English], Latino [stated in English], Spanish [Espagne in Arabic]. NRFU respondent answered, "French." The enumerator clarified, "No, not the language you speak, for example, what's your origin?" NRFU respondent answered, "Lebanese." The enumerator tried to clarify again, "Yes, for sure you are Lebanese, but there's nothing (inaudible)?"

Although it was most common on "identity" questions, some enumerators utilized terms that respondents could recognize, despite their imperfect match with the census' English concepts, to cope with conceptual non-equivalency issues on other census questions as well. Thus, for example, in Russian, the concept "stay" cannot be translated in one English word. It needs a collocation (such as "overnight" for example) to connote a meaning that is closer to that intended by the question in the census form. Most Russian respondents observed in this study come from the Soviet background where travelling and staying at hotels (the situation where the verb "stay" in Russian is used) would be a very rare event. When someone "stays in the house" (in the sense understood by most Americans) it is usually expressed in Russian through a rather different set of expressions (such as "came for a few days" or "were here for a few days") that are far more vague and indefinite in their temporal reference than suggested by the U.S. census wording which hones in on a very specific date. Many enumerators thus opted to use the Russian verb "live" instead, which while much clearer to their interlocutors could also mislead respondents in other ways because of its implicit association with the notion of "permanent residency" in the Russian context.

However, on most questions other than those about ethnic or racial identity, most bilingual enumerators seemed less willing to so readily accept the responses formulated through concepts with imperfect equivalency. Rather, in an effort to solicit the precise information the census question sought they usually adopted one of two possible strategies. They sometimes dramatically streamlined and simplified the question by breaking it up in a way that could allow them to more rapidly obtain the "desired information". Thus, for example in the Russian context, in which the bilingual enumerators knew that many respondents were renters they rephrased the

question from one that asked respondents to choose from a long list of options, to one that required a simple "yes" or "no" response to individual options posed in the order of greatest likelihood (as perceived by the enumerator). In the Russian case this resulted in a sequence of interrogatives (for this particular question) that either: a) started with the question "Do you pay rent?" (as in the first example below), or b) turned to this streamlining strategy when the question in its fully scripted form resulted in apparent respondent confusion (as per the second example below). Please note that the interviewer switched between Russian and English in this interview:

E: [onazaplatit rent, da?]
=she pays rent, yes?
R: [da]
=yes.
E: Do you or does someone in this household own this apartment with a mortgage or loan including home equity loans, or own it free and clear, or rent it, or occupy it without having to pay rent. And you can choose one of those four choices.
R: mm.
E: [Vyplatit'e rent?]
=Do you pay rent?
R: Rent, only rent.
E: She pays rent.

An alternative strategy for coping with this form of discursive dissonance often involved asking what in essence was a different question altogether -- in a form that was more easily recognizable to respondents -- and that provided information from which enumerators believed they could reliably infer the "correct" answer. This was a strategy that the field teams saw deployed with significant frequency in the Arabic and Spanish-speaking contexts in order to cope with the confusion that resulted from the "April 1" question. Typically Arabic enumerators would thus respond to the confusion of NRFU respondents with this question with a version of "I mean how long have you been here?" Such rewording allayed any confusion (or suspicion) of the NRFU respondent about the intent of the question, by providing a sensible inquiry to the respondent, from which the enumerator would then infer an answer to the April 1 question. A very similar strategy was deployed in many Spanish-speaking interviews on this same question (as per the two examples of Spanish bilingual enumerator rewording provided below):

(*¿Cuándo se mudó a este hogar?*
When moved[3rd person singular -- formal] to this household
"When did you move here?"

(*¿Cuánto tiempo lleva viviendo aquí?*
How much time spend [3rd person singular -- formal] living here
How long have you been living here?"

A final strategy for coping with what could often be a combination of discursive dissonance, ulterior signaling, and social affront involved breaking with the script by providing additional

explanatory information in the form of either a followup after the question or before it. In the Spanish context this strategy was often deployed in the form of explanations given about why telephone numbers were being solicited in order to allay fears that information might be used for other purposes. In other cases explanations or elaborations might follow a question deemed to hold potential for eliciting suspicion or causing social affront. A good example was a Korean enumerator who consistently followed up every query about whether children were biological or adopted with a variant of the following apologetic: "That question was not appropriate for Koreans, but I had to ask because its on the form." Frequently this type of strategy was also deployed in order to help respondents navigate through their confusion with a particular question in order to help them understand exactly what was being asked about. Thus, for example this was frequently the strategy employed with Vietnamese and Arabic speakers confused by the "April 1 residency" question.

Enumerators in different communities also used other forms of script-departure -- including humor -- for coping with such cases of potential affront.

5.2.3 Summary

Standardization is the goal that survey methodologists strive to achieve in data collection. Survey interviewers are generally trained to read the questions as worded. Deviation from the script is usually considered an indicator of performance deficiency on the part of the interviewer. 2010 Census NRFU enumerators received similar rigid training regarding the importance of standardized interviews prior to going out to the field. Enumerators were instructed to follow the script and read census questions as worded (cf. NRFU interview training manual). The training that census enumerators receive is particularly dogmatic in its insistence on the use of a particular verbatim script and on its intolerance for interactional or communicative deviations that have been increasingly recognized as permissible and indeed sometimes even necessary in order to reduce non-response as well as other forms of measurement error in conventional survey research.

Summary of the research teams' observations of NRFU interviews in English and in seven target languages indicates that when interviewing English-speaking households, the enumerators usually followed the script more closely than when they interviewed non-English speaking households. This does not mean that enumerators read questions as worded in all English interviews. As reported in another 2010 Census Program for Evaluation and Experiments study (Childs and Jurgenson, 2011) that evaluated the 2010 NRFU questions through the method of behavior coding, it is observed that "across all questions, only 37 percent were asked in the ideal form" (p. 4) and "overall, interviewers often changed the wording of the questions" (p. 5). Our observational study shows similar findings for English NRFU interviews.

But by way of contrast, an important finding from this study is that for NRFU interviews conducted in languages other than English, virtually *all* enumerators went off script. Three main problems were identified in terms of questionnaire design and question development that led to the departure of script on the part of enumerators: (1) lack of conceptual equivalency between

the ideas invoked by certain English terms and the terms available in other languages; (2) lack of meta-communicative equivalency, which refers to differences between communicative conventions that tend to frame and inform the meaning of utterances in interaction between native English-speakers in the American context and those that inform non-English speakers; and (3) NRFU interview protocol was developed in English and it may not flow naturally in languages other than English. Often times it created awkwardness and confusion in the interaction. As a result, enumerators deployed a range of tactics for coping with conceptual and meta-communicative non-equivalency in the census questionnaire. All of these tactics involved departure from the established interview script to maintain the interaction. As we discuss at greater length in the Conclusion and Recommendations, these observation suggest a need for serious further research and re-conceptualization in the development of NRFU questionnaire and interview protocol.

5.3 The use and effectiveness of in-language materials in NRFU interviews

As mentioned in the introduction section, in order to meet the challenge of language barriers in the 2010 Census, the Census Bureau developed many in-language materials, such as the English-Spanish bilingual 2010 Census form, the 2010 Census fulfillment form in the top five non-English languages (Spanish, Chinese, Korean, Russian, and Vietnamese), Spanish NRFU Interview Job Aid, and Language Identification Flashcard and language assistance guides in 59 languages. The current research provided an opportunity to observe how these in-language materials were used in the field, and to assess the efficacy of these materials.

5.3.1 Spanish Job Aid

The Spanish job aid is a full translation of a questionnaire from English into the target language to assist the enumerator in the field. When encountering a non-English speaking household, an enumerator can refer to the Job Aid for standard translation of the questions and answer options so as to avoid translating on-the-fly. However, for the 2010 Census, the NRFU interview job aid was available only in Spanish.

As observed by the Spanish research team, the Spanish Job Aid proved to be a useful tool for monolingual English enumerators as well as English-Spanish enumerators. The Spanish team observed 3 monolingual English enumerators and 15 English-Spanish bilingual enumerators. They all used the Spanish Job Aid extensively. Only one monolingual English enumerator did not use the Spanish Job Aid until her English-Spanish bilingual enumerator colleague mentioned that using the Spanish Job Aid would simplify her interview process with monolingual Spanish respondents. She agreed and proceeded to use them for the remainder of her interviews. The monolingual English enumerator stated that there were so many papers that she needed to keep track of, that she had forgotten that the Spanish Job Aid was even in her packet.

The Spanish Job Aid was useful for all enumerators though for somewhat different reasons. For the English-Spanish bilingual enumerators, they introduced the topic of the interaction following the scripted Spanish-language protocol and handed the Spanish Job Aid to the monolingual Spanish respondents to refer to. The monolingual English enumerators followed the English-

language script but when interviewing monolingual Spanish respondents, they pointed to specific questions on the Spanish Job Aid (if it was used) so that the monolingual Spanish respondents could follow along.

One of the big concerns of many Spanish-speaking respondents is immigration status. Many of them believed that the Census Bureau might have a hidden agenda: to reveal information to immigration officials regarding undocumented status. They shared the common concern that the INS would have access to the information collected, and they were afraid of having the information used against them by the INS or the IRS (Elias-Olivares and Farr, 1991).

The following excerpt from ethnographic interviews with monolingual Spanish respondents exemplifies this mistrust.

> *La mera verdad puede ser esto como no es uno de este país …y pues claro, te llegan así …es que es lo que uno puede pensar. Te pueden llevar… te pueden echar la migración. Por eso. El censo nomás puede ser cuántos están viviendo.*
> The truth is that since you're not from this country…and, of course, they [Immigration] come out of nowhere…and what else can you conclude. They [Immigration] can take you…immigration [officers] can throw you out [of the U.S.]. That's why. [However] the census could only be asking about how many are living [in the household].

Although not all monolingual Spanish respondents in this observational study came out and stated their fears and distrust, those that did share this information confirmed this was a shared concern among their circle of friends.

From the research team's observations, any mistrust that may have existed was overcome because of one of the following reasons: the monolingual Spanish respondents were able to see that the English-Spanish bilingual enumerator was a person from his or her own community or that the patiently adamant enumerator (both English-Spanish bilingual and monolingual English enumerators) ensured that they understood the confidentiality issue. One way to dispel any mistrust was the need for clear explanation of the census' purpose, as shown in the following excerpts by two monolingual Spanish respondents.

> *Me imagino para calmar la gente…hablarles más claro…que uno entiende palabras …que uno no entiende ciertas palabras. Poner un papel que puede entender…uno a veces que los hijos tienen que explicarles a los padres.*

> I think that in order to eliminate future uneasiness…talk to them [monolingual Spanish respondents] more clearly…so you understand the words…we don't understand certain words. Give an [information sheet] that we can understand [in Spanish]…sometimes we have to have our children explain it to us.

The English-Spanish bilingual enumerators were able to relay this information readily in Spanish by emphasizing the confidentiality issue and that the census was not connected -- and in fact firewalled -- from any sector the U.S. government that deals with immigration issues. The

monolingual English enumerators were also successful at gaining the monolingual Spanish respondents' trust by pointing to the written language about confidentiality on the Spanish Job Aid as well as stating in English "No one else would know," a phrase that was understood by the monolingual Spanish respondents. In this case, the Spanish Job Aid was a helpful tool to ease the mistrust and fear of Spanish respondents.

In the instances where the bilingual enumerator and bilingual ethnographer interpreted, the Spanish Job Aid was used as it provided ready-made language for the English-Spanish bilingual enumerators who often read directly from the Spanish Job Aid. In the case of the monolingual English enumerators who read the question in English, the Spanish Job Aid provided a ready-made translation that they could point to at the same time.

Another use of the Job Aid is that most monolingual Spanish respondents took the cue from the Spanish Job Aid to answer the question. The literate monolingual Spanish respondents read the lists as directed by the enumerators and had no trouble with the target language of the Spanish Job Aid. However it provided little assistance to the English-only enumerator in those cases in which respondents were illiterate. In such cases an interpreter had to be found, or else the interview simply ended (2 cases).

5.3.2 Use of language materials in other languages

While the Spanish Job Aid was observed to be useful and effective in the Spanish NRFU interviews, such a Job Aid was not available in other non-English languages. Language materials available in languages other than English include the Census Bureau language ID flashcard, 2010 Census fulfillment form, and language assistance guides. However these materials were not made available to many LCOs or to NRFU enumerators.

5.3.2.1 Job Aid, 2010 Census fulfillment form, and language assistance guides

All seven language research teams reported that they did not observe any NRFU enumerator make use standard translation provided in the 2010 Census fulfillment form or in the language assistance guides. In fact, none of the enumerators that the ethnographers observed actually made use of any in-language materials. They further reported that no enumerators they encountered had been given access to Census Bureau Chinese language materials. This happened for several reasons:

1. The materials were not made available to the field. During the field work, the bilingual ethnographers were able to visit LCOs and discuss the issue with LCO management. It was reported that in-language materials were not provided to LCOs in print. They were available online only. Some LCOs were aware that there were in-language materials available on the 2010 Census website, but they did not have time to download and print the materials. Checking in-language materials online takes extra amount of time from their already fully-loaded schedule. They focused mainly on completing the NRFU cases within the timeframe. When they encountered language problems, they relied on the bilingual enumerators to communicate with those non-English speaking households. They assumed that the bilingual enumerators could

handle the language problems by translating on the fly. The requirement for standardized translation was not clearly communicated to the LCOs.

2. The information on the availability of in-language materials was mentioned briefly during the enumerator training in some LCOs. But by the time the enumerators went out to the field, they either forgot about it, or they were too busy to check the census website. Some of them did not have access to a computer. As a result, none of the enumerators that the ethnographers observed actually made use of any in-language materials.

3. Many of the enumerators that the ethnographers interviewed were not even aware that there existed such in-language materials. They commented that they were not informed that the census question was translated into multiple languages and that there were official translations of census questions that they could refer to when the need arose.

4. Lack of clear communication on how to use in-language materials. For example, the language assistance guide was not designed as data collection form. It was intended to be used and printed out to help monolingual respondents fill-out the English census questionnaires. However, the purpose and usage of the language assistance guide were not clearly communicated to the public. The language assistance guide either lost its value as a assisting tool to fill out the census questionnaire, or being used for the wrong purpose. For example, in the Portuguese community, in an interview with the director of an immigrant organization in the Massachusetts area, it was found that monolingual Portuguese respondents were given the Portuguese language assistance guide by the immigrant organization and mistakenly filled out the guide and mailed it thinking it was the actual census questionnaire. This explains why oftentimes the Portuguese research team met with respondents who were quite upset to find enumerators at their door when they thought they had already mailed the questionnaire. In other words, it seems that the language guide inadvertently had the negative unintentional effect of producing annulled questionnaires.

5.3.2.2 Language identification flashcard

A language identification flashcard is one of the tools in enumerators' toolkit. It is a 3 page, trifold standard size document, containing a list of 50 languages, with a statement of "Hello, I'm from the U.S. Census Bureau. Is someone here now who speaks English and can help us? If not, please write your phone number and someone will contact you in _____ (target language)." This statement is printed in 50 languages on both sides of the trifold language ID flashcard. The purpose of the language ID flashcard is to help enumerators to identify the language spoken at a household that appears to speak a language other than English. However, the language ID flashcard is a long list of 50 languages folded in one document. It appears to be rather cumbersome for enumerators to use in the field. No enumerator was observed using the language ID flashcard in NRFU interviews.

For example, the Portuguese team reported that "we did not observe the use of the Language ID flashcard," which was translated into multiple languages. In a few cases Portuguese-speaking enumerators calibrated from Portuguese to Spanish when confronted with monolingual Spanish

speakers, but this was done with great difficulty and without using the Spanish language written materials. When asked why they did not use it, a common explanation was that it was cumbersome and in some cases silly, because you would have to show a page long of introductions in many languages and hope that one would fit the household. Furthermore, the "language ID" flashcard presumed literacy, which was certainly not always the case."

Another reason is that the ethnographers were assigned to accompany bilingual enumerators in areas of high concentration of speakers of target languages. Since LCOs aimed to recruit enumerators from the local community, they had the knowledge of what languages were spoken in their local areas and made every effort to recruit enumerators who spoke the target languages. Bilingual enumerators were recruited and assigned to work in areas with high concentration of speakers of target languages. Before enumerators went out into field, they had already had some general information of their targeted households (such as the language spoken in the community) that they were to enumerate. As a result, it was not necessary for enumerators to rely on the language ID flashcard to communicate with respondents. However, no enumerators nor LCO managers commented that the language ID flashcard was not a useful tool. It is just that during this field work, no actual use of it was observed.

5.3.2.3 Other in-language materials needed in the field

Notice of visits: From this field work, it was observed that when no one was home at a household, the enumerator needed to leave a Census Bureau notice of visit to inform the household of the visit, and to alert them that the enumerator would revisit the household. However, this notice of visit was in English only. It would not of any help to households that do not understand English. Sometimes, the enumerator had to handwrite the necessary information in the target language on the notice. It was cumbersome to the enumerator, and the handwriting was not always eligible to the respondent. Many enumerators commented that they wished they had the notice of visit in target languages so they could easily leave it at the doorstep and move on to the next household.

Confidentiality statement: Another piece of in-language document that the enumerators wished they could have was the confidentiality statement to assure respondents that their personal information would be kept confidential. In some communities (e.g., Korean, Russian, Spanish), there were serious concerns of fraud and government agencies sharing the data. The enumerators found the confidentiality statement very helpful in addressing this particular concern of many non-English speaking respondents, but the confidentiality statement was available in English only. Enumerators had to translate it on-the-fly. Oftentimes, they only translated a few words or one or two sentences from the document. Having a standard translation of the confidentiality statement in target languages would help ease the burden of this extra amount of work for enumerators.

5.3.2.4 Literacy and in-language materials

In-language materials are printed materials that presume certain literacy level on the part of the enumerator and the respondent as well. If the presumed level of literacy is not there, the printed

in-language materials of Job Aid or Language ID flashcard would be of no use to the enumerator or the respondent.

For example, the Spanish research team observed that in one third of the cases in which monolingual Spanish respondents were given the Spanish Job Aid, it was unclear whether or not they were able to read them. A stronger indication of the extent of lack of literacy could be gleaned from those cases in which the monolingual English enumerators asked monolingual Spanish respondents to point to an answer on the Spanish Job Aid. In four of these cases (50 percent of the total observed with this enumerator) the monolingual Spanish respondents directly stated that they could not read.[21] Clearly, monolingual Spanish respondent illiteracy presents a problem if a monolingual English enumerator cannot find an interpreter.

The Arabic team reported that for those respondents who did not speak English fluently, literacy levels in English were uniformly low. One consistent item of data collected involved the names and birthdates/ages of those listed as living in the household. When English literacy was low, an official ID (SS card, or driver's license) was often shown in order to provide correct spelling and birthrate. Although literacy may be a main obstacle as to why the forms were not filled out and returned in the first place, enumerators oftentimes proceeded as if NRFU Respondents had English literacy, making data collection awkward at times, and/or challenging as noted in the following field notes:

> Woman NRFU respondent, with poor English literacy, in the middle of trying to spell her name in English, which she cannot do very well, provided the letters in French. As she attempted to provide spelling for names, she often hesitated, and then explained, "I am learning English little by little. My language is French. I know (my English is still not good). The researcher then attempted to console her embarrassment by acknowledging, "It's a little hard (to learn English)."

In the same interview, the enumerator handed NRFU a list (in English), from which various answers could be chosen. She asked NRFU respondent to refer to the list as she proceeded to ask her what relationship each household member was to her, but in so doing acknowledged that NRFU did not read English, "OK, now M, what is he to you from the list? You don't read English" to which R responded, "I mean I can, but--" E then interrupted her and asked, "Yeah, what is M to you?"

Significantly for this study, illiteracy is not peculiar to one language community. Regardless of language group, it is extremely hard for a respondent to reveal to a total stranger that he/she is illiterate. In areas of high illiteracy rates language guides and questionnaires are useless to respondents. Hence, special care, time and effort should be granted in these situations.

5.3.3 Summary

[21] At this point the interview would have ended since the questions were difficult for the monolingual English enumerator to reword in simpler English. Accordingly the English-Spanish bilingual ethnographer was recruited by the enumerator and interpreted.

This observational study shows that enumerators appreciated in-language tools to help them enumerate non-English speaking households, and were desirous of more such materials. Currently there are two main issues with the effective use of in-language materials for NRFU interviews: (1) accessibility of existing in-language materials; (2) availability of needed in-language materials. Specifically, enumerators in this study were not aware of any in-language materials that the 2010 Census provided. They only had a Spanish Job Aid provided to them. They had no access to other useful in-language materials such as the standard translation of the 2010 Census form and the language assistance guides. There is a general lack of information on how to use available in-language materials in the field. Additionally, there was a great need for more in-language materials, including the fully translated NRFU questionnaire, notice of visits, and confidentiality statement. These materials are deemed as useful resources by enumerators that can help them convince reluctant or suspicious respondents. Such materials were not available during the 2010 Census.

5.4 On-the-fly translation and use of interpreters

Due to the lack of adequate in-language materials to assist enumerators in the field, enumerators frequently conducted on-the-fly translation when they encountered non-English speaking households if enumerators are bilingual themselves. In the case of monolingual English enumerators, they had to recruit and use someone who speaks the target language to interpret for the interview.

5.4.1 On-the-fly translation

The issue of non-equivalency and how enumerators developed strategies to cope with it has been discussed. One of the strategies is to deviate from the script so they could engage the respondent and complete the interview. There is one more reason that underlies the departure of the script. That is, enumerators had to translate NRFU questions on-the-fly and they needed to conform to the conversation norms in natural interaction, in particular, in the target language. The ordering of NRFU questions may not sound natural in conversation in English to start with. When translating on-the-fly, the enumerators re-ordered the questions to make them fit the interactional flow of the conversation with respondents.

Careful examination of transcripts of interviews indicates that enumerators tended to first ask those census questions that they believe were important or were most relevant (e.g., how many people in the household, their names, and age). Other questions were either completely omitted or asked later in the interview (e.g., race and ethnicity question, sex question, or tenure question). The following excerpt from a Korean interview exemplifies the aforementioned characteristics:

Female in her early 40's (Korean)

1	E:	Yeah, hello?
2	R:	Yeah.
3	E:	Yeah, I came from the census, you know?
4	R:	Oh yeah.
5	E:	We came here yesterday, too.

6	R:	Oh, did you?
7	E:	Yes uh so, can I do this for a second?
8	R:	We uh (.) wanted to send it and we waited, but we didn't get the form.
9	E:	Oh really?
10	R:	We called and they said somebody would come.
11	E:	Ok, then, how many people are there here?
12	R:	Uh three children uh man- uh adults -
13	E:	Two adults.
14	R:	Yes. A married couple.
15	E:	Wow, it's great, it's exactly five people and only one form will do. If it's
16		more than five people, we'll need two, but one will be enough.
17	R:	(Do it in here.) He's recording this.
18	E:	You've lived here for a long time?
19	R:	Uh: we haven't been in this place for a long time
20	E:	But still, it's been at least one year, hasn't it?
21	R:	Yes, it's been about a year.
22	E:	If you were here at least from April. (.) And uh do you know Mr. Shin at
23		next door?
24	R:	Yes, we came to know him after we moved here.
25	E:	Oh did you?
26	R:	Yes.
27	E:	Uh- he goes to the same church as me, you know? So I did this with him
28		just a while ago.
29	R:	Oh yeah. You are doing a lot of good work.
30	E:	((chuckle)) Well thanks. Uh what is your name?

The respondent went on to give her name and the names of her family members. The enumerator did not ask the sex question, because the respondent told the enumerator the name of her children by stating that "Sebbin is a daughter," and "Dyland is a son." The enumerator just noted down the sex without asking the sex question. The enumerator skipped the race and ethnicity questions all together in this interview.

In this interview, the enumerator departed significantly from the NRFU questionnaire. The enumerator first stated that he came from the Census Bureau (line 3) and then skipped four screening questions (S1-S4). Of the five screening questions (S1-S5), he only asked one (S5) in a much streamlined format in line 11: "Ok, then, how many people are there here?" This question seems most relevant to the statement that he came from the Census Bureau, since the Census's mission is to count people.

Translating on-the-fly created many otherwise avoidable errors and communication problems. The issues include, but not limited to:

1. Translation quality depended on the language abilities of the enumerators. Many bilingual enumerators' language proficiency was self-reported and not verified by any assessment procedures. Some bilingual enumerators were heritage speakers of the target

language, without formal education in the target language. Translating on-the-fly was a difficult task for them due to their lack of proficiency in the target language. In addition, translation is a skill that requires more than just language proficiency. Bilingual enumerators may not have the necessary translation skill even if they have the language ability.

2. There were many instances of incomplete, inaccurate translation of census questions, and many cases of skipping answer categories, or skipping certain questions altogether.

3. On-the-fly translation can create additional communication problems. The exchange between the enumerator and the respondent was not smooth due to code-switching between English and the target language. For example, in a Chinese case, the enumerator, an American-born Chinese man who spoke Mandarin as a second language, had difficulty translating certain questions and had difficulty explaining to a Mandarin-speaking respondent why he was asking these questions. He reverted to saying "U.S. Census Bureau" in English, which confused the respondent even more because the respondent did not understand English.

5.4.2 Interpretation issues

When encountering non-English speaking households, there were two scenarios: bilingual and monolingual enumerators. In the first scenario, there were bilingual enumerators doing the interviews. They would translate the census questions on-the-fly, and no interpreters were recruited. The second scenario was the cases in which English monolingual enumerators went to the field do the interview. In such situations, the visit ended as soon as the door was opened by a non-English speaker and the enumerator had a chance to identify the native language of the respondent. After this the enumerator prepared a note for the team leader indicating that a target-language-speaking enumerator or an interpreter would be needed for the next visit. The debriefing with enumerators further indicated that some enumerators preferred to leave a note for their crew leader to handle the case instead of looking for an interpreter on the spot.

But many enumerators did make an effort to find an interpreter in order to complete the interview. Oftentimes, the following types of people were recruited to act as interpreters: (1) children of the monolingual respondent recruited by the respondent; (2) an English-target language bilingual neighbor; (3) an English-target language bilingual enumerator recruited by the monolingual English enumerator; and (4) an English-target language bilingual ethnographer conducting the current research. In all cases, the general principal underlying interpreter recruitment strategy was use of the first bilingual person at hand.

For example, the Portuguese research team reported that typically enumerators looked for interpreters on the street, knocked at neighbors' doors, and asked for family members. In one case a mailman who spoke Portuguese and knew the neighborhood offered to help as long as it was for only a few words. In a few other instances young children below appropriate age (such as in their early teens) were asked to help out. Regardless of attempts to find interpreters, in neighborhoods where the younger generation was away at work, it was extremely hard to find them.

As noted in the previous section, even bilingual enumerator's on-the-fly translation was not always accurate or complete. Having someone serve as an interpreter on-the-spot added yet another layer of difficulty to the challenge of effective translation. The person acting as an interpreter not only had to translate on-the-fly, but also encountered many challenges due to a lack of knowledge of census questions and the purpose of census, except in the case of a bilingual enumerator or a bilingual ethnographer acting as an interpreter for another enumerator.

Of the seven teams, the Spanish team reported some positive effects of having someone serve as the interpreter. In spite of some communication breakdowns in the process, the presence of a bilingual neighbor or a child helped the respondent understand the questions, and helped the enumerator complete the interview. In the cases where the monolingual English enumerator recruited an interpreter, she felt comfortable with the recruitment and the interpreter. The monolingual English enumerator did not verify the linguistic competence of the interpreter she recruited due to the fact that she could not speak Spanish. However, the interpreter's linguistic competence may have been implicitly verified since the responses that the interpreter gave were appropriate answers for the questions asked and because she knew that the interpreters she recruited were both hired by the Census Bureau to work with the Hispanic population due to their language skills. In the instances where the bilingual enumerator and bilingual ethnographer interpreted, the Spanish Job Aid was used in the interview.

In the cases where an interpreter (neighbor or child) was recruited by the monolingual Spanish respondents, the interpreters' competency may have been implicitly verified by the respondents' personal knowledge of their child or neighbor's language proficiency. The monolingual Spanish respondents expressed gratitude for the bilingual interpreters they recruited since it allowed them to understand the questions, answer correctly, and finish quickly.

The six interpreters' translations of the census questions were on the fly and accurate based on the bilingual ethnographers' assessment. Any added information was a repeat using different lexicon or rephrasing, as described in previous sections. For example, the *rentar* "to rent" was used after reading *alquilar*; *dueño* in addition to *propietario* "owner"; and *traila* "mobile home" in addition to *casa móvil*. The original translations may have been difficult to read aloud, which may have made it difficult for the respondents to understand the questions. Using a literal translation may feel and sound awkward to the interpreter as well as to the respondent. So these on-the-fly interpretations may have helped the respondents understand the questions and successfully complete the NRFU interview. In no case did the respondent express confusion over the translation, with the exception of those questions whose content was confusing (e.g., race and tenure at household questions).

Other language teams, while acknowledging the fact that a bilingual person could help interpreting for the enumerators and contribute to the successful completion of the NRFU interview, they documented two main issues: (1) use of children to act as an interpreter, (2) skipping or modifying questions during the interview.

5.4.2.1 Use of children to act as an interpreter for census enumerators

When encountering a household whose language was not English or was different from the one that the enumerator spoke, the enumerator in most cases asked the children in the household to translate on the spot. For example, a Chinese-speaking enumerator said that in her encounters with Spanish speakers, children would be home and would translate. The use of children to act as an interpreter for NRFU interviews has mixed effects.

Of the seven teams, only the Spanish team reported positive effect of having a child acting as an interpreter in the sense that having someone speaking the target language could save the interview. The Spanish team noted that in the case of the English-Spanish bilingual child interpreters, two were recruited into the response process at the start when the questions/statements made by the enumerator became difficult for the monolingual Spanish parents to deal with, in particular, when the enumerator was explaining the reason for the visit, the amount of time it would take, and confidentiality for data collection. In these two cases the Spanish team reported that the English-Spanish bilingual children's presence positively affected the interview by helping the parent understand the questions, and by speeding up the interview, allowing the monolingual Spanish father to return to work after the interview.

Other language teams reported some negative effects of having children act as an interpreter for two reasons: data quality and cognitive and emotional burden on the child who acted as the interpreter. While children's presence could help save the interview, a close examination of the interview process revealed that the quality of data collected was greatly compromised. Reports from Arabic, Chinese, and Russian teams indicated that in many instances where children were used as interpreters, enumerators skipped over more complicated questions. For example, in one case a Chinese-speaking enumerator used the young son of a Korean female respondent to extract basic information, such as first and last names. However, she skipped questions about other children such as foster children (in survey question H1) and whether the home was owned with a mortgage (in survey question H2).

Cognitive or emotional burden is another issue observed with children acting as interpreters. Arabic team reported that reasons children were used as interpreters had more to do with the NRFU respondent than the enumerator. If a child was present, the respondent (not the enumerator) often asked the child to interpret. The respondent sometimes instructed the child to stand in for the parent to answer the census questions. When they served as translators, they mediated not necessarily between modern standard Arabic and colloquial Arabic, but between English and colloquial Arabic. The child would be told the question in English, and s/he would then translate into colloquial Arabic for the parent. The child played many mediating roles, serving simply to translate at times, to answer a question, or to both translate and answer. For instance, the child answered questions when the parent simply did not know the answer (e.g., specific birthdates).

When children were used as interpreters, the questions were revised to be simpler, but sometimes children themselves provided the answers while they interpreted. For example, one enumerator observed by the Arabic team, who was not fully bilingual, was relieved when a child could be counted on to ask the Arabic-speaking parent the census questions, especially if the respondent was in a hurry (female enumerator accompanied by the male researcher), although another

admitted that if and when children were recruited as an interpreter they often did not know as much (male enumerator accompanied by the male researcher), and hence made it more difficult to ask the census questions, especially because the child often answered the questions stating that their parents did not speak English. Moreover, none of the team members reported that any enumerator ever attempted to verify any interpreter's language abilities.

In all, having children serve as interpreters introduced some inaccuracies, and occasional discomfort on the part of the respondents. Some cases were observed by the teams in which the respondents had to intercede when their children answered the questions for them.

5.4.2.2 Skipping or modifying questions

The positive effect of having someone serve as interpreters for NRFU interviews is that it can secure the completion of an interview, but sometimes, it can be at the expense of data quality. Interpreters oftentimes skipped or simplified the questions asked by the enumerator. Recognizing the fact that even enumerators themselves skipped or simplified questions, a layperson may be more inclined to do so when he or she was recruited to serve as an interpreter on the spot.

The Russian team's summary of the strategies that interpreters employed in the interview is rather accurate and relevant to an understanding of pros and cons of these strategies. The Russian report stated that there were three strategies used by interpreters that seemed to be effective in securing the successful completion of the interview. First, interpreters tended to replace the conceptually less familiar word, such as replacing the word "stay" (in S2 and S5) with the word "live." Or they replaced some more formal terminology with colloquial words. Obviously they tended to demonstrate a desire to simplify the questions and interview process to make the interview short and efficient.

Second, the interpreters streamlined the long question and reduced multiple answer categories to one category, reducing the linguistic content (dropping words and conjunctions) of the question and answer, and supplying only the information requested in question. For example, when asking the question concerning housing (H2), even after the enumerator read an entire list of options for the payment arrangements of the occupants, the interpreter preferred to simply inquire whether the occupant paid rent. This is partly because the question was too long to translate, and partly because the one interpreter was a social worker who was familiar with the housing and its residents. Also, the problematic questions, such as a question related to the type of housing, centered on those where the respondents were presented with a list of options to choose from. The respondents seemed to be overwhelmed with the options and found it hard to answer promptly at the first questioning. Subsequently, the interpreter concentrated on the pertinent information and was able to elicit answers that often resulted in a more efficient process. However, perhaps a more reliable process would be to present the questions not as a list that the respondent must remember and process in order to answer correctly, but as individual "yes" or "no" questions that require a lower level of comprehension and processing of the pertinent information needed to answer the question properly.

Third, for some census questions, the interpreters either answered the question on behalf of the respondents or paraphrased the question to make it in a way more relevant to the socio-cultural context of the respondent. For example, for the race question, one interpreter answered the race question on behalf of the respondent by saying "she's white" in the interview. In another interview, the interpreter simply used the term "nationality" for "race" since the concept of race is not entirely clear to Russian respondents. Instead, "nationality" is a term that Russian speakers could more readily relate, but that might not correspond exactly with predominant American understandings of "race". The interpreter's strategies illustrated the interpreter's familiarity with the socio-cultural and linguistic background of the respondents and a strong awareness of the lack of conceptual equivalency in the phrasing of certain census questions.

Although the three strategies discussed above seemed to work well in completing the interview and in easing the interview process, the assurance of the data quality is not available since these strategies entailed deviation from the questionnaire script.

5.4.3 Summary

The findings indicate that due to the lack of adequate in-language materials, enumerators relied mainly on two approaches in their interaction with non-English speaking households: translating on the fly or having an ad hoc interpreter mediate the interview. The current practice of on-the-fly translation and the use of ad hoc interpreters posed a potential threat to data quality in spite of the fact that these approaches enabled enumerators to complete NRFU interviews. Issues observed include: (1) inaccurate and incomplete translation of census questions; (2) modifying census questions or skipping some questions completely; (3) use of ad hoc interpreters, especially children, to interpret on the spot created some communication problems or cognitive and emotional burden on the under-age interpreter.

5.5 Non-English speaking respondents' perception of and reactions to the 2010 Census

A specific research question that was grafted onto this project after its initial conceptualization was to explore how LEP populations perceived and reacted to the 2010 Census Integrated Communications Program and outreach efforts. This sub-section summarizes findings from ethnographers' debriefings with enumerators and respondents regarding their perception of the census and reaction to the 2010 Census Integrated Communications Program.

It is important to note interview the primary observations undertaken in our field studies were not designed to observe the impact of the 2010 Census Integrated Communications Program per se. The only data we collected that speaks to these set of questions is from our debriefing and focus-group interviews as well as the insights provided by our ethnographers based on their long-term experience conducting research in these communities. Therefore unlike the data that speaks to our other questions which is derived from the direct observations of the NRFU interview by our ethnographic research teams, the data we draw upon to speak to this question is based primarily on respondent self-reporting that is largely retrospective. In this sense our research on this question our findings should be read quite tentatively. They are perhaps most useful in suggesting lines of inquiry that would benefit from further ethnographic observation

and survey work that should be designed with this specific focus in mind. With this important caveat in mind the interviews collected by our team indicated that:

With the above caveat in mind, one theme that emerged from the field studies is that while the 2010 Census Integrated Communications Program and outreach efforts seemed increase the level of awareness of the upcoming census among the observed non-English speaking populations in our study, it appears that this awareness of the 2010 Census did not necessarily translate into action. Below we discuss what our findings suggest as might be some of the reasons underwriting this dissonance between awareness and action. In particular we explore: (1) impact of media and English mailing on immigrant communities; (2) immigrant's prior experience with a census process; and (3) their perception of and reaction to the U.S. census.

5.5.1 Media impact: Mixed effects

In our observed communities of language, the Census Integrated Communication Program appeared to have been effective in communicating to them the fact that a national census would be held in 2010 and that their participation was important. A review of the individual field team studies suggests that only a small fraction of respondents of the target language communities indicated that they read English-language periodicals or watched English-language television often. Instead, most of them learned about news, both international and domestic, by reading in-language ethnic newspapers, reading target language websites, watching ethnic television stations (local access or satellite), as a result of concerted community organization outreach efforts, or by chatting with friends. Nevertheless, a majority of respondents indicated they had seen information about the 2010 Census in media and public outlets, in target language newspapers, and on in-language television.

For example, in the research site state where the Spanish research team conducted the observations, a majority of the monolingual Spanish respondents that they observed knew about the U.S. census. The Spanish team believed that this was due to the fact that most of the Spanish-speaking respondents observed by the team had seen Spanish-language cable advertisements about the census. It would be uncommon to find a Hispanic household that did not subscribe to these networks, even in low-income households. Based on the debriefings with respondents and enumerators in the research site, the Spanish team reported that cable was the number source of census information, together with other sources. A majority of respondents heard about the census through multiple sources. In this research site state, Hispanic community center contacts, Spanish-language radio, and public schools, sometimes working together, ran what appear to have been effective information programs about the census.

However, in the other language communities in this observational study, the effect of the Census Integrated Communication Program seemed less clear. For example, the Arabic research team reported that for the Arabic community they observed, approximately one-third of the English-speaking NRFU interviewees (slightly less than half were of Arabic-speaking origin), had not heard of the census before. For the other two-thirds, those who had heard of it, media (cable, newspaper, radio, mail and TV) and word of mouth (other people in the community, school) were their sources. Approximately half of the NRFU Arabic-speaking respondents stated they

had never heard of the census before. For those who did hear about it, the media (TV, news, mail) accounted for about one half of their sources. The other half indicated that they had learned about it from other people (family members, co-workers) or via ethnic organizations including mosques and social service agencies.

Given high illiteracy rates within some of the language communities observed, newspapers seemed less important or effective than other forms of media in reaching LEP respondents. For example, the Portuguese team reported that the Portuguese radio was noted in debriefings as effective, but that particular aspects of timing of the broadcast reportedly made a difference. Thus those who were unemployed or retired were apparently more likely than others to listen to the radio during the day. This may have mattered because it was largely during the day that most of the Census Bureau's campaigns were broadcast. During the evening, the television took precedence over the radio. The Portuguese television channels -- RTP International (broadcast from Portugal) and the local Portuguese channel (broadcast from Massachusetts) -- were commonly identified as the best source of information about the census.

Our field studies also suggest that while they may have had some awareness about the census, that did not necessarily mean that non-English speaking respondents fully understood the procedure. Thus some non-English speaking respondents commented that they did hear about the census from the news, but still did not understand that the census form needed to be filled out and returned.

Some of the 2010 Census Integrated Communications Program's well intended efforts may have also inadvertently led individuals to conclude they had completed the census form when they actually had not. Thus, for example some Portuguese immigrants believed they had already completed the census form because they had filled out a language assistance guide at an immigration assistance center. They had not understood that the guide itself was merely meant to help them understand the form and had mistaken what in effect was a pedagogical exercise for the real thing.

5.5.2 Handling census forms in the mail

During the debriefing interviews with respondents our field teams also asked several questions about how they had handled the census form sent through the mail debriefings with NRFU respondents at the end of the NRFU interviews. It should be underscored that the data we collected about this is based purely upon respondents' verbal reports.

With that caveat in mind, our field teams found some general differences between English speakers and speakers of other languages in the reasons that were offered for not returning the census form. The English speakers overwhelmingly stated they were simply too busy and did not get to it. For example, one English-speaking respondent observed by the Arabic team stated that she did receive two notices to mail back the form but failed to mail it back because she had been so busy with kids, school and other activities.

The reasons that emerged in debriefings with LEP respondents seemed quite a bit more varied and included reasons that did not arise in the interviews with native English speakers. The list of reasons provided by they did not fill out and mail back the census form, the non-English speaking respondents included:

1. Never saw the census form.
2. Never received it in the mail.
3. Did not know what it was when it arrived in the mail.
4. Did not read English.
5. Their children or spouses lost it.
6. Did not know what to do with the form.
7. Waiting for a target-language speaking enumerator to come to do the interview (heard about this from the census media campaign).
8. Confused the census form with other documents.
9. It was another piece of junk mail.
10. Did not care enough to figure out what it was.
11. Forgot/had no time/no patience/did not care to mail the form.
12. Already filled it out and mailed it, but the "census people" lost it.
13. Reluctance or fear about how the information might be used and why it was being solicited.
14. Doubts about whether the information was really being collected by and for the census.

These are the salient themes emerged from the debriefings with non-English speaking respondents from the seven language communities. Although not all the themes appeared in every language community in this study, most of them are shared across the seven language groups. In particular it seems that English mail was a big challenge when household members lacked English literacy. The research teams reported that though mail was retrieved regularly by non-English speaking households, it was not always understood. Family members, neighbors, and ethnic organizations were relied upon, and aided in communicating the meaning and the purpose of a piece of mail, in this case, the purpose of the census mailing. Many respondents said they usually threw away most of their mail that they thought to be junk.

Another telling observation across language groups was that not a single one of our teams found a single respondent who was even aware that the census form was available in languages other than English.

When informed that such forms were available, some respondents indicated that this knowledge would not have motivated them to go through the step of asking for an in-language census form even if they had been aware one was available. A number of these respondents said they would have only used those in-language forms if an in-language form was actually delivered to their hands in the first place.

5.5.3 Literacy and census mailing

The 2010 Census mail out/mail back operation required a certain level of English literacy on the part of respondents to understand and complete the census form. It is generally correct to assume that while there are many fluent bilinguals among speakers of non-English languages, those non-English language speakers that fall into the NRFU operation are likely to have among the lowest levels of English literacy. This ethnographic observation does not falsify that assumption. The seven language teams reported that English literacy levels appeared to be low among many of the NRFU respondents who spoke a language other than English. This may be one of the main reasons that they did not return the census form in the mail. They simply did not have sufficiency English reading ability to understand the census questionnaire coming in the mail. Most of them did not read English mail at all. Many of them indicated that they did ask their English-speaking children or friends to tell them if the mail was important or not. However, the definition of what they counted as "important" varied. In many cases it did not seem that the census ranked very high on the priority or importance list of those non-English speaking immigrants.

For example, the Portuguese team observed that despite high illiteracy rates among the Portuguese-speaking respondents, most of the respondents they had interviewed did acknowledge receiving something from the Census Bureau in the mail. Most of these reported they set the form aside to complete at a later date with the help of someone else (even if they did not get to it before the NRFU interview occurred). That is, they were able to associate information transmitted orally and visually about the census with the mailed questionnaire (this ability can be attributed to the TV campaigns and community organizations). However, many did not have timely assistance they needed to fill it out and return it. Others apparently misplaced the envelope or mixed it with other "official looking" correspondence (such as social security information and municipal correspondence). Significantly, most Portuguese households valued receiving written correspondence, even when they could not read and understand its content. However, they also observed that illiterate respondents seemed to resort to visual cues such as font size, color, format, and other symbols to organize and categorize their mail. Unfortunately, in so doing envelopes and letters that "looked alike" were categorized as being the same independent of their different contents (such as a municipal census, which in some instances was confused with the federal one). It seems that these different factors may have conspired to affect non-return.

5.5.4 Census taking as a social practice

The term "survey literacy" is used here to refer to the level of familiarity with survey conventions such as answering survey questions and filling out a survey questionnaire. Although surveys have become relatively common research methods in western cultures, it can be a much more foreign concept to those who come from other cultures. Our previous studies (Chan and Pan, 2011; Pan, 2008; Pan et al., 2005) showed that a lack of adequate survey literacy among Chinese speakers caused many difficulties when these people were asked to fill out a survey questionnaire or to participate in a survey. Thus, completion of a self-administered questionnaire

or answering survey questions may present a challenge when respondents have no survey schema.

Thus, as reported by the Spanish team, for about half of the monolingual Spanish respondents observed in their fieldwork, the NRFU interview was the first survey in which they had ever participated. This inexperience did not negatively affect the NRFU interview, but this may have contribute to the explanation of why they had not filled out nor returned the written form in the first place. The Spanish team further pointed out that the cultural background of recent immigrant monolingual Spanish respondents may not have provided a frame of reference for interpreting concepts such as "confidentiality". It has been shown in previous research on census nonresponse patterns (Elias-Olivares and Farr, 1991) that:

> literacy *per se* is not the barrier…; that is, there was no general lack of knowledge of the Spanish or English writing systems (alphabets). Rather, the problem seems to be traceable to a lack of experience with this kind, or use, of literacy. …Perhaps in an effort to include as much information as possible in limited space, there is much print, some of which is quite small (p. 40).

Common conventions used in survey forms, such as parenthetical instructions and instructions for skip patterns, may also have proven difficult to understand (Kissam, Herrera, and Nakamoto, 1993). Survey illiteracy may be a barrier in face-to-face interviews as well. Survey interviews presuppose that respondents are willing to talk to strangers and to reveal personal information so long as the importance of a survey is explained. With respondents who have never had the experience of participating in a survey or being interviewed, this practice can be intimating especially when they do not have sufficient English proficiency or American cultural knowledge to understand how surveys work. In cultures where there is a clear distinction between inside and outside relations, such as Chinese, Korean, and Arabic, it is extremely uncomfortable for a respondent to talk to a total stranger without some form of introduction from a trusted source such as local community immigrant services.

Other factors could also come into play. Thus the Chinese team reported that the issue among many Chinese-speaking respondents was not an awareness problem, but a stakeholder problem. Many Chinese immigrants simply did not see themselves as stakeholders in American society or perceive any benefits for them by participating in the census.

Although our findings are tentative at best, they suggest that the Census Integrated Communication Program media had variable rates of success in reaching different target immigrant communities. However, that success did not always translate into a full understanding the census procedure or process. Moreover, understanding was sometimes insufficient to motivate participation.

Another factor that may have affected participation stemmed from differences in census practices between U.S. and the country of origin of non-English speaking respondents. For those who had prior experience with the census in the country of origin, some apparently had a certain set of expectations of census procedure and census questions that were quite different from the U.S.

Census Bureau's procedures and questions. For example, the Russian team reported that the majority of the respondents in this study represented a group of elderly immigrants, and so it was not surprising that 63 percent had participated in the census back in the USSR and 18 percent had also participated in prior U.S. census operations. They reported that in the Russian census, the forms were not mailed to the households, but rather schoolchildren from local schools conducted the enumeration around the neighborhood. Clearly, a visit by Russian schoolchildren may be perceived as less threatening than an interview conducted by a stranger speaking the language that most of the respondents did not understand (Isurin et al., 2012).

5.5.5 Fear or distrust of the government

In their debriefing interviews our field teams also uncovered a certain level of fear and distrust of government that may have underwritten LEP respondent reluctance to participate. The individual reports discuss the specific grounds on which such sentiments were either expressed directly during debriefings or else inferred by from observations or from less direct statements. It is however difficult to draw any definitive conclusions about the precise role that such sentiments may have played in constraining the participation of LEP participants. However, one of the more interesting observations that emerges from a comparison of the discussions of these issues within the different communities of language, is that respondents from different communities tended to highlight different types of specific concerns. Further investigation of the range of these concerns and of the extent to which specific issues play out differently in different LEP communities may be useful to the Census Bureau in its effort to craft effective future communication campaigns.

5.5.5.1 Fear of government scrutiny

Within the Spanish-speaking community examined in this study, many respondents expressed an apparently high degree of doubt and concern about how the information that was being requested would be utilized. Thus, several respondents indicated during the debriefing interviews that even though the Spanish-language cable stations informed the audience that the census responses were kept confidential, they still worried that their answers would still be shared with other entities of the government. Several monolingual Spanish respondents were quite explicit in articulating their distrust about the purpose of the census.

Most of those who shared their opinion with the research team stated that they believed that the census enumerators were doing a government job and were personally upholding the confidentiality agreement. However, they also suspected that the Census Bureau as might have a hidden agenda: to reveal information to immigration officials regarding undocumented status. These concerns that "the Immigration and Naturalization Service will have access to the information collected; …[or they will have] information used against them by the INS or the IRS [Internal Revenue Service]…" (Elias-Olivares and Farr, 1991, p. 44) have been documented as common among this population. These concerns notwithstanding, as our team observed it monolingual Spanish-speaking respondents for the most part still participated in the NRFU interview.

In the Vietnamese community a different form of concern was articulated. Thus rather than worrying about whether their immigration status would be revealed, they expressed more concern that information about their economic activity -- some of which appears to have undocumented -- would be subject to unwanted scrutiny.

5.5.5.2 Fear of fraud

In contrast, most Korean respondents did not express much mistrust of the government nor about the uses of census. However, some did verbalize their concern about whether interviews or other forms of provision of information were actually related to the census at all, or conversely, might be part of a possible fraudulent scheme. Some of respondents, especially those who had already mailed out the form were particularly suspicious of whether the enumerator was actually from the Census Bureau office.

Fraud was repeatedly highlighted in the Korean community website discussions about the census. Indeed, the main issue that was discussed on this website was whether a phone call or a visit from the Census Bureau office was authentic or false. Below, some examples of expressions of concern are excerpted from the postings reviewed:

> "I already did the census, and then why would a Korean person call and ask questions? Did this happen to any of you, too? A Korean guy called and said he would like to confirm something. I told him that I had filled in accurate information, but he explained as if the call was legitimate. He asked me to respond. He already called several times, but I refused."
>
> "Somebody came from the Census. I already mailed it out, you know. But I used a Korean form from a Korean grocery store. Do you think it was an invalid form? I don't even remember if I wrote my social security number on the form. Anyway, I mailed it out, but this guy came and said they didn't get it. The funny thing was his English was worse than mine. He even brought a form that was already written in pencil. He was trying to erase it, so I told him to come back with a new form. Oh, I checked his badge, too."
>
> "I lost the paper form, and so somebody came last week. But now I think he came too early. Do you think he was really from the census? I don't remember exactly what he asked about. I don't remember if he asked my social security number, either. I didn't have any doubt at the time, but now I don't feel good about it."

Without pretending to be comprehensive or identify the full range of concerns within any given LEP community the table below provides a brief snapshot of issues that tended to be emerge in that were largely specific to each community. These are highlighted merely to suggest potentially relevant issue to be investigated further in the course of planning how effective communication campaigns might be tailored to those communities.

Table 6. Fears that tended to be raised in particular groups

Language group	Concerns
Arabic	Some respondents discussed their worries about government surveillance in the context of their experience of anti-Arab sentiments post 9-11.
Chinese	Some respondents seemed particularly concerned with questions about the numbers of residents in the household.
Korean	Respondents seemed particularly concerned with ascertaining this was a "real" census interview and not some sort of fraudulent identity theft scheme.
Portuguese	Some respondents seemed concerned about the use of census information and whether it would be utilized by INS.
Russian	Some respondents expressed a concern with identity theft. Others were concerned that previous claims they had made to social services (e.g. about age) or about the relationships amongst household co-residents might be subject to undesirable scrutiny.
Spanish	Respondents distrusted the purpose of the census, suspecting that the information provided would be used to find and prosecute individuals with undocumented status. In a limited number of debriefing sessions reference was made to laws recently passed in Arizona and elsewhere.
Vietnamese	Some respondents expressed a concern that their economic activity was being scrutinized or that the census might be a prelude to such scrutiny.

5.5.6 Summary

This exploratory research suggests that LEP populations all had some level of awareness of the 2010 Census as a result of the advertisements by the 2010 Census Integrated Communications Program. However, that awareness may have varied to a significant extent in the different communities. Language barriers may have played a role that was amplified by illiteracy in these languages. Moreover there are some indications that general awareness did not necessarily translate into a complete understanding of what the census procedure involved. Reception of information -- whether partial or complete -- about the census also did not necessarily address other factors that may have mitigated participation. Some of those factors included concerns that may have been somewhat community specific.

6 RELATED EVALUATIONS, EXPERIMENTS, AND/OR ASSESSMENTS

There are three studies conducted under the 2010 Census Program for Evaluations and Experiments that are relevant to this report. They are *2010 Census: Language Program Assessment Report* (Kim and Zapata, 2012); a behavior coding study on NRFU questions, *Behavior Coding of the 2010 Nonresponse Followup (NRFU) Interviews Report* (Childs and Jurgenson, 2011); and a forthcoming ethnographic study of enumeration methods of diverse race and ethnic groups, *Comparative Ethnographic Studies of Enumeration Methods and Coverage in Race/Ethnic Groups* (Schwede and Terry, forthcoming).

7 KEY LESSONS LEARNED, CONCLUSIONS, AND RECOMMENDATIONS

Findings from this study highlight the challenges and possible strategies in enumerating immigrant groups with limited English proficiency. As the study alluded to, in spite of its challenges, face-to-face interviewing seems to be a more effective method for collecting census data from non-English speaking respondents. At the same time, as an effort to reduce data collection cost, it is very likely that the 2020 Census will look into the possibility of employing different technologies, such as the Internet and smartphones, in its operation to collect census data. Generally speaking, emerging technologies hold a great deal of promise for increasing the effectiveness of coverage and reducing the cost for enumerating the general population as a whole. In addition, Internet data collection instruments in many languages are easier to operationalize than bilingual/multilingual paper questionnaires.

However, respondents with limited or no English proficiency are likely to remain a hard-to-reach and hard-to-count population due to many of the issues -- linguistic and sociocultural -- that were reported in this study, and they are more likely to fall into the NRFU operation. Since this study focused on the NRFU interview process, in the recommendations section, possible ways in which technology can be productively brought to bear in the NRFU interview process with these populations are explored. This is an area that warrants additional focused research. Nevertheless, few of the factors that this study has noted as playing a prominent role in mediating access, or securing reliable information from these populations, seem likely to be addressed by new technologies alone. Thus, the recommendations in this report draw upon the research findings to suggest measures that might improve the effectiveness of the NRFU process for these communities of language and comparable groups from other communities of language with limited English proficiency.

It is acknowledged that the findings are based on exploratory work, and many are working propositions that should be informed by additional research. While the individual language studies conducted by the teams provide recommendations specific to each of those communities that can be readily accessed for operational purposes,[22] in this conclusion the focus is on broader recommendations that are applicable in principle to all populations with limited or no English proficiency.

One additional caveat prefaces these recommendations:

It is also acknowledged that enumerating LEP populations is one part of a complex system. The requirements of LEP enumeration will compete for time, attention, and money with many other concerns. There are admittedly many exigencies -- some of which are methodological and others which are not -- that impinge on NRFU operations. The authors recognize that they are not in a position to even fully know what all of these factors are, much less attempt to determine how the

[22] See Ajrouch, Pan and Lubkemann (2012) for Arabic findings, Shepherd, Pan and Lubkemann (2012) for Chinese findings, Yoon, Pan and Lubkemann (2012) for Korean findings, Rodrigues, Pan and Lubkemann (2012) for Portuguese findings, Isurin, Pan and Lubkemann (2012) for Russian findings, and Isabelli, Pan and Lubkemann (2012) for Spanish findings.

recommendations might fit into their reasonable balance. In this sense the recommendations merely suggest the measures that might be considered if the objective is to ensure that the language-related problems that may prevent LEP populations from participating in the census to the same extent as English-speakers can be reduced. The question of if and how such considerations stack up against other valid methodological, budgetary, logistical, and policy questions rests with those who are in a better position than the authors presume to be in. With these constraints in mind, the following recommendations are proposed for consideration in the 2020 Census planning process.

Primary Recommendation: Developing a strategy and program for 2020 Census Coverage of Limited English Proficiency populations

This study clearly identified challenges in conducting the NRFU interview that are both broadly shared across the seven different communities of language in which the field research was conducted as well as issues that were ultimately specific to each of those communities in their own right. The fact that this study ranged across groups hailing from very different linguistic families and socio-historic backgrounds (including those with Euro-Latin, Middle Eastern, Asian, and Slavic bases) strongly suggests that a similar mix of both shared and particular mediating factors are likely to arise in *all* communities of language in which a significant proportion of members have limited English proficiency -- and not just those that were the focus of this study. According to the 2007 American Community Survey several other groups not contemplated in this study are likely to confront problems comparable to those identified here. Most notably these include, and yet are not limited to, French speaking immigrants from Haiti and West Africa (e.g., Senegal), Hmong speakers from Cambodia, and Amharic speakers from Ethiopia. Given the current presence of such other significant linguistic immigrant minorities -- and immigration trends into the U.S. that suggest the rapid growth of several LEP populations (such as Russian, Spanish, and Chinese speakers in particular) -- a first essential recommendation is that the Census Bureau begin to develop a general strategy for:

1. Utilizing the Partnership Program to take inventory of these populations and their locations of likely highest concentration in the 2020 Census. This should include periodic monitoring of immigration, language acquisition, technology use, and demographic trends within these communities throughout the next six years prior to the beginning of 2020 Census operations (which will need to be determined by 2018).

2. Developing and testing within each selected community of language the following (based on part B above):
   - translation materials;
   - new interpretive support mechanisms;
   - bilingual interviewer recruitment standards, procedures, and strategies;
   - specialized NRFU training for interviewers and site managers who will be enumerating these populations;
   - procedural protocols for the referral of LEP households to bilingual interviewers;
   - community messaging strategies; and finally
   - quality assurance monitoring research that can verify the effectiveness of these

measures during the 2020 Census itself.

Many of these activities could be developed in conjunction with and as a part of existing partnership development programs. Subsequent recommendations elaborate more specifically on the aforementioned individual elements of this broader overall strategic planning process.

Secondary Recommendation Set I: Expand and Add to the Partnership Program with Limited English Proficiency-Community Organizations

The study results highlight the important role that the Partnership Program played with local community organizations in informing non-English speaking immigrants about the census, in mobilizing and motivating their participation, and in providing them with assistance. Given the disproportionate suspicion and fear among many immigrant groups, it may be especially effective to work closely with organizations that are already trusted by these populations. The partnership program can be expanded by undertaking the following:

1. *Develop an understanding of organizational structure in Limited English Proficiency communities*

The study shows each community of language has its own particular ways of social networking and of organizing its most defining social activities. Thus it is important to develop an understanding of the range of organizations and their respective roles in disseminating and legitimizing different kinds of information to different segments of each respective LEP community. For example most Koreans in this study listed churches as the most important source of reliable information within their community. This reflects the fact that churches are a ubiquitous social institution within virtually every local Korean community in the U.S. (Yoon et al., 2012). Korean churches have very powerful and extensive influences in many aspects of these local communities, and hence probably provide the most effective social mechanism for advertising and educating about the census. The Census Bureau would work more directly with them to encourage census participation and to explain how to be counted if they haven't already been.

By way of contrast, other communities of language exhibit important forms of internal heterogeneity that are reflected in their community organization profiles. Thus, for example the field team reported that many of the more established and well-known Chinese community service organizations tend to be oriented towards older cohorts that originate from Taiwan or Hong Kong and who generally have high levels of English competency. However, these organizations do not generally have a strong connection to the more recent and far less English-fluent immigrants from the Chinese mainland (Zhou and Kim, 2006). It is thus not very effective to focus outreach efforts on these Chinese-American service organizations only -- despite the fact that they are the most well-established "Chinese" community organizations with the highest public profile. Rather, in order to effectively reach the growing number of Chinese immigrants with limited English proficiency ties with other types of organizations need be cultivated -- such as with mainland Chinese student groups on university campuses, religious institutions that primarily serve mainland immigrants, and new professional associations that have emerged in tandem with the increase in mainland immigration.

In yet further contrast: there is significant variation in terms of which community organizations are subscribed to by immigrants from different countries within the broader Portuguese community of language. Thus, Cape Verdean, (continental) Portuguese, and Brazilian organizations each provided very different messages about the census to their respective Portuguese-speaking constituents. Cape Verdean and Portuguese groups were very proactive in promoting census participation -- albeit driven by contrastive "identity agendas" (Cape Verdeans in particular were concerned that their constituents self-identify as "Cape Verdean" rather than being subsumed under "Portuguese"; while Portuguese organizations encouraged self-identification as "Portuguese" in contrast to Hispanic). Brazilian organizations were much more passive -- and in some cases actually discouraged immigrants from participation.

In short, a comprehensive empirical understanding of immigrant community organizations and their relationships to particular segments of their community-of-language is a pre-requisite for designing effective community organizations outreach and partnership programs that are not based on linguistically-cued oversimplifications (i.e., such as assuming that an organization that is "Chinese" is equally effective in reaching all types of Chinese). In most of the significant LEP communities considerable social science research has been conducted and can be reviewed as first step in developing such community-organization profiles. A subsequent step would involve additional outreach to/research with organizations within each of these communities that could ground truth findings based on the review of secondary sources, update these, and fill any remaining gaps. This could be accomplished through a combination of additional research and consultations organized through the Census Bureau Partnership Program that already exists.

2. *Identifying the most effective communication channels for target language communities*

One central focus of the proposed LEP community outreach program should be a process of extensive consultation with these organizations that seeks to ascertain the most effective communication channels through which to reach the various different segments within each respective community of language. For example, it seems likely that Russian language television and radio channels in cities with a high concentration of Russian immigrants are more likely to provide the most effective means within that target population, but other communities of language may have different channels of communication. Thus, each community of language is likely to require a different communication channel strategy to maximize coverage and ensure efficiency. In each of these communities, consultations should take into account important internal social differentiators, including ethnicity, nationality, cohort, sex, and literacy -- each as determined to be relevant within each particular community of language. Such consultations should provide the basis for a more targeted outreach campaign that is both more effective and resource efficient.

This study also indicates a gap between awareness and action among non-English speaking populations. The fact that significant portions of some LEP populations (e.g., Koreans) may be aware of the census and yet still do not act thus suggests that it is far from enough to just promote census awareness per se and that a more proactive approach needs to be taken. As part of a more comprehensive LEP community organization partnership program the Census Bureau's media campaign should consider developing audio-visual modules that demonstrate

how to complete the census form and how to return it -- using people who look like and speak like the various LEP target populations. This is all the more important because of the limited survey literacy that was identified within segments of several different LEP groups. Indeed for a significant number of non-English speaking respondents, completing the census form -- whether mailed or during the NRFU interview process -- was a first-time event that proved confusing in a variety of ways. The consultations with LEP community organizations about channel effectiveness should thus also address the ways in which these modules can be used most effectively to comprehensively reach the targeted LEP population.

3. *Engaging the Partnership Program for developing and testing Limited English Proficiency-community-targeted message content*

Organizations within each LEP community should be engaged in consultations aimed at developing more effective message content about the census and in subsequent pretesting of the message content. This activity should have two primary objectives. One is to develop messages that effectively explain what the census is about and why the census is conducted -- *but also (and more innovatively) that explain the objective of particular questions.* This kind of information will not only help people understand the value of the census in order to encourage their participation but will educate them about the content itself. Adding this component to community outreach efforts may potentially pre-empt some of the meta-communicative and conceptual non-equivalency problems that the field research found arising so frequently during the NRFU interviews with LEP populations.

A second objective should be to tailor messages that address concerns that may be specific to each different immigrant communities. This study clearly indicates that different immigrant communities have different types of concerns regarding government activities in general and the divulgation of particular items of information in particular. It would thus be more effective to tailor promotional messages so that they address the unique concerns within each community. It is important that research on this subject be conducted later in the decade in order to account for the potential evolution and change in such concerns -- most particularly in the time period just prior to the 2020 Census.

4. *Utilizing the Partnership Program for testing Limited English Proficiency-community-specific interview protocols, translated questionnaires, and additional language assistance materials.*

Many of these community organizations already offer a variety of assistance to non-English speaking immigrants, such as filing health insurance claims, applying for food stamps, and offering legal advice. They have the first-hand information and experience in communicating with LEP populations and have access to a variety of LEP populations. It is recommended that the 2020 Census consider utilizing the Partnership Program in a systematic manner for pretesting LEP-community specific interview protocols, translated questionnaires, and additional language assistance materials with speakers of the target languages to ensure cultural appropriateness (see Recommendation 8 below). Currently the task of pretesting translated questionnaires and in-language materials is within the Associate Directorate of Research and Methodology, which has a strong research component, but does not have an established working relationship with local immigrant community organizations. The Partnership Program can be utilized as a vehicle to

reach the target LEP-communities to obtain feedback on in-language materials and to test translated questionnaires and interview protocols.

Secondary Recommendation Set 2. Develop effective in-language materials for all major Limited English Proficiency populations

5. *Develop a fully-translated Census Enumeration Questionnaire, including response cards in significant Limited English Proficiency population target languages*

Given the verified difficulties with translation on-the-fly, variations within given languages (e.g., Portuguese, Arabic), and the importance of language as an identity marker for many non-English speaking respondents, the census enumeration questionnaire should be fully translated into the target languages of significant LEP populations. When there are dialectal variations within a language (such as is the case in Arabic and Portuguese) it is recommended that the translations be done in the standard form of the language, but that language aides also be developed that assist enumerators with the most significant colloquial variations.

There are multiple advantages in producing a complete standardized translation of a Census Enumerator Questionnaire. First, this measure will help mitigate dialectical differences by providing an anchor for colloquial variation. This is particularly important because dialectical differences are more pronounced at the oral/colloquial level than on the written level. It will also provide a written standard that enumerators can resort to (if needed) in order to communicate with respondents from diverse dialectical backgrounds who may not understand their particular oral pronunciation. Language aides for enumerators that also identify particularly significant colloquial variations for particular terms will further ensure more effective communication. Second, this measure will also limit the number of omissions and mistakes that occur when any given enumerator is given the freedom to translate based solely on his/her knowledge of the target language. This is particularly important in the case of enumerators who are only partially bilingual, such as in the case of several heritage speakers observed in the Portuguese and Cape Verdean field studies. A third benefit of complete standardized translations is that they will enhance community outreach. A complete translation would greatly assist the community organizations that are already engaged in encouraging census participation amongst non-English speaking populations. Complete Census Enumerator Questionnaire translation will also assist literate monolingual households and household members in helping illiterate non-English speaking respondents fill out questionnaires; Fourth, this measure will likely increase trust and cultivate confidence in the census process among non-English speaking immigrants. Among segments of several immigrant communities that have high illiteracy rates, the written word is highly valued and respected. Hence, a Census Enumerator Questionnaire in target languages may thus reassure even an illiterate respondent's confidence that the government is indeed invested in counting everyone independent of race, ethnicity, and linguistic background.

6. *Provide fully translated informational materials, including Confidentiality Statement and Notice of Visit*

Providing informational materials in target languages is beneficial to both the respondent and the enumerator. A written statement in target languages stating how confidentiality is protected under Federal Law (independent of one's immigration status) could explain to non-English

speaking respondents how their information is protected and it could enhance the participation from undocumented migrants who are afraid of coming into contact with enumerators. This could help the enumerator in the field because they will have the right language to explain to the respondent. A notice of visit in target languages would also help explain the purpose of the enumerator's visit and could encourage participation from non-English speaking respondents. Operationally, further research and usability testing are recommended on whether to provide such materials in multiple languages on one notice or a separate notice for each language.

7. *Provide printed copies of in-language census information instead of online only*

This study suggests that having in-language materials available online is clearly not a measure that is sufficient for reaching this intended audience. While certainly cost-efficient, online language assistance materials are most accessible to those within the immigrant community who do not need such assistance, such as professionals who regularly access the Internet. In support of the recommendations about media targeting, distributing printed copies of these materials to not just immigrant community centers and supermarkets but also places where undocumented and low-wage workers are most likely to be found, such as restaurants, light industrial sites, and informal employment centers, is suggested. Operationally, Questionnaire Assistance Centers in communities should work closely with immigrant organizations to provide printed in-language materials to those who need such assistance.

8. *Pretest all translations with speakers of target languages to ensure cultural appropriateness of the translation*

The importance of pre-testing all translated materials with speakers of target languages cannot be overemphasized. In order to ensure that the translation of the 2020 Census questionnaire and language assistance materials are of high quality and effective, cognitive and in-field tests of in-language data collection materials are recommended, including the census questionnaire and related materials, Confidentiality Statement and Notice of Visit, as well as any audio-visual or interactive video versions (see below). Also, a formal review process (expert review, focus group) should be set in place for reviewing in-language promotional and informational materials.

Secondary Recommendation Set 3. The Nonresponse Followup Instrument, Process, and Protocol

In addition to develop a translated version of the NRFU questionnaire in target languages, there are some additional measures that can be taken to improve the process:

9. *Automation of Nonresponse Followup instrument to allow enumerators to toggle between the English and in-language instrument*

Exploring ways to automate NRFU instrument with emerging technologies so that enumerators can toggle between the English and in-language instrument to reduce the burden of carrying paper translations is recommended.

10. *Optimizing questionnaire design for Limited English Proficiency populations*

This study suggests that four issues may need to be addressed in terms of questionnaire design and interview protocol development for LEP populations. Most of these recommendations will probably require additional research and testing in order to reach the objective of optimization.

A first and basic challenge involves ensuring maximum accuracy in the translation of specific terms in foreign language versions of the census form itself. For example, ensuring that "American age" rather than "Korean age" is solicited will require a terminological modification of the question when asked in Korean. Similarly, terminological solutions are likely to be available in a number of instances in which words (such as "residencia" in Spanish) currently mean more than intended by the English word "residence." Just like English questions that receive vigorous testing before fielded, all translations should be subjected to pretesting in order to ensure that the most accurate terminology possible is being used in translation. This is probably the simplest and easiest measure to undertake in the revising of translated questionnaires.

A more challenging issue is how to address concepts that are problematic in terms of their essential conceptual equivalency. Additional research and testing may prove that standardized explanations/elaborations such as those recommended above can provide some assistance in these cases, though it is unlikely they will do so for all of them, for all LEP communities of language. The study findings suggests that this particularly likely to be the case on questions about categories of social identity (e.g. "race, "ethnicity/Hispanic origin") which tend to be culturally constructed in highly variable and thus in what are essentially cross-culturally incommensurable ways.

Such conceptual non-equivalency poses several considerations for protocol design. The first of these is a methodological choice between either: (1) attempting to provide an explanation of a concept that is largely alien to the respondent's experience or functional understanding and asking them to them to use it; or (2) deferring to a concept that is meaningful to the respondent but at best has only partial overlap with the concept the survey intends to measure. Drawing from the findings we have summarized in this report, one example of the concretization of such a choice might be whether to attempt to extensively explain the American concept of "ethnicity" to a Russian speaker, or conversely to accept an answer to the Hispanic origins question (such as "Jewish" or "Russian") that reflects a Russian-speaker's own understanding of social identity categories (based on the concept of "nationality").

The way forward on this issue thus depends in first instance on clarification about the fundamental information that these questions should be seeking of LEP respondents. Thus, is the fundamental question behind these census questions one about how individuals ultimately relate to social identity categories that are the predominant ones that shape socialization and understandings of group identity within the broad "American mainstream"? If so, then the informational objective must be to maximize the extent to which LEP respondents who may not use or be familiar with these categories understand and utilize them. However, if the fundamental "question behind the question" is a different one: for example, "what form of supra-kinship socio-cultural group identity is the one that respondents subscribe to?" then the technical

remedies may well move in an entirely different -- indeed almost opposite -- direction from those described above. The ultimate objective in these instances would be to design the protocol to encourage LEPs to utilize social group identity categories meaningful to them.

However, a failure to make that choice (or a lack of awareness that it even exists) has a direct bearing on measurement error. Thus, absent a methodological decision (embodied in explicit protocol) to systematically opt one way or the other, *both* of the possible outcomes we have just discussed are likely to occur simultaneously -- and in *unknown proportion* to each other -- as a result of the individual choices and improvisations of enumerators. The existence of this sort of variance was certainly verified as a result of our observations even if it was not measured in a precise way. In short on methodological grounds alone, making this choice should improve analysis by at very least ensuring that there is the form of consistency that rigorous analysis requires.

An even thornier challenge involves addressing not only conceptual non-equivalencies but meta-communicative ones -- i.e. the misunderstandings and confusion that arise within particular communities of language as a result of differences in meta-communicative conventions. A good example of this type of problem is that confusion that was observed to often ensue over the "April 1" question -- which is often misunderstood not because of conceptual non-equivalence, but because the way it is asked invites unintended forms of emphasis when "alien" meta-communicative conventions (i.e., those of LEP respondents) are applied in its interpretation.

At an even broader level a fourth and equally challenging issue involves considering how the NRFU interview process and protocol might be adapted to address the social interactional challenges that are specific to different communities of language. Recognizing the NRFU interview as a form of social interaction, and not merely an instance of communication, suggests the need to consider how protocols would need to be adapted to account for how the culturally-specific expectations of LEPs -- about social conventions and about communication itself -- affect access and the information flow within the interview.

In practice effective measures for addressing these last two challenges are likely to require that more than the linguistic code itself be modified for each different community of language. Other things that will almost certainly require significant modification in order to maximize the standardization of effect include not only wording, question sequencing, but often the extent of background information and explanation provided, as well as many other aspects of interactional protocol.

Hitherto, the commonality of all of these -- save linguistic code -- have been safeguarded and regarded by survey researchers as sacrosanct requisites for maximizing standardization. Yet, as our findings suggest that the safeguarding of these "extra-code" factors in fact may jeopardize the potential for securing the standardization of communicative effect. This study suggests that communicative and interactional success of the census enumeration with different LEP populations often *depended upon* the capacity of bilingual enumerators to *deviate* from established protocol in many respects in order to negotiate access, achieve communicative success, and contend with situations of conceptual non-equivalency.

Such deviations from the script are typically treated as a significant methodological problem that undermines the integrity of standardization. However, in the cases the field teams observed they actually represented an (often apparently successful) effort to ensure that respondents, whose communicative and interactional conventions differed from those in which the standardized questions and interviewing protocols were generated, actually provided the information that the questions had been designed to obtain. In this sense these deviations more often than not represented informal, ad-hoc, and implicit efforts to translate meta-communicative and social conventions in order to *protect and ensure the standardization of effect.*

Based on these observation it is therefore suggested that the standardization of communicative effect across the entire U.S. population might be improved by drawing up standardized wording and protocols for the NRFU interview at the *language (or possibly dialect)-specific level*, rather than (as is currently the case) at the population level. Thus while the protocols might differ significantly in all the respects noted above (including but going beyond linguistic code itself) from one community-of-language to the next, a common protocol would apply to all members within any given community of language.

Finally, and more generally, the findings also suggest that regardless of the language in which it is carried out, there may benefits from providing somewhat more flexibility to NRFU interviewers than the current protocol provides. Indeed the rigidity of that protocol seems somewhat out of step with shifts of thinking in conventional survey research that have taken account of important research on the ways in which the tacit knowledge of enumerators can serve as a resource for reducing measurement error rather than as an inevitable source for increasing it (e.g., van der Zouwen, 2002, Schaeffer and Maynard, 2002). Indeed this may be one reason why a relatively recent overview of the conventional practice in several major U.S. survey centers has trended towards granting greater tactical autonomy to interviewers than was once the case (Viterna and Maynard, 2002). Determination of the exact forms and extent of such autonomy should obviously be the product of very careful additional cognitive and field research and would imply new directives for training census enumerators across the board.

11. *Explore effective ways to harness new technologies in order to communicate with illiterate Limited English Proficiency respondents during the Nonresponse Followup interview.*
The current format of all the Census Bureau language aid materials assumes literacy on the part of respondents. As these observations show, literacy is a big issue for many LEP or non-English speaking respondents. It is recommended that the 2020 Census explore innovative ways to use emerging audio-visual technologies and to develop alternative methods for communicating during the NRFU interview with illiterate LEP and/or NES respondents. For example NRFU enumerators would benefit from having equipment that allows them to show audio-visual only versions of the modules whose development already recommended. Interactive video technology may also provide a particularly promising mechanism for facilitating the NRFU process with illiterate LEP/NES respondents, providing that videos are developed in the appropriate language and fully account for the meta-communicative conventions specific to these respective communities of language. Another possibility that should be considered is the development of a phone bank support system that can be tapped into a language service mechanism with a large

pool of speakers of different languages who are trained to do interpretation. NRFU interviewers who find themselves in an interview with a respondent of LEP could call a support person fluent in the respective LEP respondent's language and receive assistance on the spot.

Secondary Recommendation Set 4. Enumerator Recruitment, Training, and Support Systems

12. *Recruit bilingual enumerators familiar with the population and with meta-communicative competence*

It is important to use bilingual enumerators that have meta-communicative competence and that are familiar with the social conventions that dictate interactional expectations within communicative events in any given community of language to collect census data from that community's LEP/NES households. It should be noted, however, that interviewers may need to use the colloquial version (after reading the modern standard), to better communicate the questions, and especially if the respondent has low education. Therefore another recommendation is to hire enumerators who are not only bilingual in English and the target language, but also familiar with the target population and familiar with the communicative conventions of this population. Hence, enumerators should continue to be recruited from local communities, but be subjected to a more rigorous demonstration of their formal language skills (see Recommendation 14 and 16 below).

13. *Develop assessment tools/procedures to verify bilingual enumerators' language ability and cross-cultural communicative competence*

Throughout these observations, which were confirmed during focus groups, enumerators often assessed their language skills above their actual linguistic competence. Hence, many of the reported bilingual enumerators hired to conduct the 2010 Census, were not actually as bilingual as they reported. Moreover many lacked meta-communicative competence as well. Lack of adequate language and meta-communicative ability in target languages contributed significantly to patterns of omissions, simplifications and to some outright errors. Thus it is recommended that the language proficiency of enumerators be *demonstrated* rather than *presumed*. Enumerators targeting non-English speaking households should be required to demonstrate full proficiency (oral, reading, and writing) in the target language -- just as they are required to do in English. A good and efficient way to improve recruitment is to require enumerators to read and write down the answers to a translated census questionnaire.

It is also important to ensure that bilingual enumerators demonstrate some level of meta-communicative competence in English and in the target language. It is recommended that the 2020 Census provide standards for evaluating meta-communicative competence when recruiting bilingual speakers to conduct the enumeration. An introductory training course on cross-cultural communication would be helpful to bilingual enumerators before they go out to the field (see Recommendation 16 below).

14. *Hire interpreters that are fully bilingual (can read and write in target languages) to accompany enumerators*

In the case where there are no bilingual enumerators in target languages available to conduct the interview, it is recommended to hire interpreters that are fully bilingual and have the ability to read and write in target languages to accompany enumerators. It is important to bear in mind that interpreters and enumerators have different skill sets, and interpreters need to work with enumerators instead of taking over the enumerator's work. Interpreters should not be recruited at an ad hoc manner in the field. Upon identifying languages spoken in a local area, LCOs can screen and recruit interpreters on a need basis during the NRFU phase. The Census Bureau can also explore other resources (e.g., National Language Corp.) to find interpreters to work in the NRFU operation.

A more systematic Partnership Program with community organizations could facilitate all of the above.

15. *Develop and provide enumerators with training on cultural sensitivity/in community-of-language-specific protocols*

It is recommended that the 2020 Census develop and provides enumerators with training on a set of practical principles of cross-cultural communication and the importance of meta-communicative competence. While it is impossible to have a training course that covers every culture, a set of high level principles on how to interact with speakers of different languages and when flexibility can be allowed will provide important guidance for enumerators when they are in the field. For example, in some LEP communities, it is culturally appropriate to invite visitors inside. By accepting this culturally important favor enumerators can ensure the success of the interview. The results of the study showed that the level of comfort observed in the respondent's behavior correlates with the dynamics in the change of the location of the interview. The interviews conducted inside the respondent's residences exhibited the highest level of comfort, and therefore, better chances of collecting more complete data. Other aspects that should be included in the content of training should be an emphasis that the enumerators' dress code as well as deployment of communicative conventions that are culturally appropriate for the target population. More generally, to the extent that standardized, community of language-specific NRFU protocols are developed (as per recommendation above) bilingual enumerators would need to receive special additional training in this respect.

16. *Provide enumerators with more hands-on training that focuses on in-the-field practice and real-life Limited English Proficiency/Non English-Speaking scenarios*

One issue brought up by the enumerators during the debriefing session was that they would have appreciated having more hours of in-the-field practice as part of their training process before starting enumeration. Although both monolingual English enumerators and bilingual enumerators appreciated the English role-playing carried out during training, they felt that they would have benefited from more situations or even by shadowing a team leader for several interviews before setting out on their own. It is particularly important that additional role-playing focus on LEP/NES scenarios. Therefore, as a measure to improve enumerator performance in LEP/NES communities, enumerator training should include more hands-on practices, such as role-playing or shadowing a leader, to learn strategies to deal with LEP/NES respondents.

In addition, the training should include a section on guidelines and procedures to follow in handling NES households and in using in-language materials. As stated before, many enumerators had no knowledge that a language guide was available online and they received no training on how to access and use it. Many were working part time and did not have access to a computer at home. Hence, the training should include mock interviews in the target language using a translated questionnaire. Ideally, this should be conducted with a range of speakers from different national backgrounds so that enumerators learn to recognize and respect that there are several dialectical varieties within one language and learn how to respond appropriately to speakers of different dialects.

In areas of high illiteracy rates language guides and questionnaires are useless to respondents. At the same time it is extremely hard for a respondent to reveal to a total stranger that he/she is illiterate. Hence, illiteracy is a big challenge for census data collection, regardless of language group. Field supervisors and enumerators should receive awareness training on how to approach illiterate respondents. Special care, time and effort should be granted in these situations.

17. *Develop and provide Limited English Proficiency-community tailored training on how to convey confidentiality message*

One key challenge that enumerators will confront in NES communities is how to effectively convey that any collected information is kept confidential. Training on alternative ways to express what confidentiality means is recommended, specifically that the responses will not be shared with any other branch of the government, especially that of immigration. The training should also include alternative ways to address concerns of NES respondents regarding providing information to the Census Bureau.

18. *Develop and provide training that specifically addresses the challenges posed by using children as interpreters*

These observations show that although children can help interpret census questions for NRFU interviews, it is challenging for children in terms of cognitive and emotional burden. Avoiding having children interpret for NRFU interviews is recommended when possible. If that is unrealistic, alternative recommendations are: 1) establish minimum age requirement, 2) provide training to enumerators that specifically addresses the challenges posed by using children as interpreters and how to handle the challenges, 3) provide clear guidance on how to explain to children about the task of interpreting and the expectation of such a task.

19. *Provide adequate training for field supervisors on handling Limited English Proficiency/Non English-Speaking cases*

Furthermore, field supervisors should also be trained to realistically account for the difficulties enumerators face with non-English speaking households. Bilingual enumerators felt they were under the pressure to finish high quantities of interviews, which was too difficult to accomplish in NES households, especially given some of the communicative conventions in a community of language that compelled longer visits. Enumerators trying to translate on the fly for NES households usually took at least twice the time than they did in a monolingual English household. Yet under the current incentive structure this diligence was not rewarded.

Secondary Recommendation 5: Program Management

20. An LEP community partnership program and the enactment of the entire suite of recommendations made above would probably require a dedicated overall manager of such a program, as it would also benefit from an individual director for the implementation of that program for each significant LEP group.

Secondary Recommendation Set 6: Additional Research Gaps and Opportunities

This report highlights three areas that this analysis has identified as either necessitating additional research or that the data produced from this project might productively inform through further analysis.

21. *Spanish-speaking Limited English Proficiency/Non English-Speaking populations: The need to research internal variation*

Spanish speakers far and away comprise the most significant number of the total LEP/NES population in the U.S. and comprise a significant number of the total U.S. population as a whole. At the same time this category exhibits significant internal variation in terms of origin and in many cases these differences map onto differences in dialect, in meta-communicative and interactional conventions, and onto a variety of consequential forms of socio-economic and other forms of status (such as legality). One of the acknowledged limitations of this study is that it only focused on one particular (Mexican-originating) segment of this much larger and highly varied community of language's population. Given the numerical significance of this particular community of language it is highly recommended that research comparable to what has been conducted here across different communities of language be designed and implemented solely within the Spanish-speaking community -- but across its most significant sub-groups (of different national or at least regional) origin.

22. *Intra-English variations*

One of the significant findings in this study is that it is not only language narrowly cast, but also meta-communicative and interactional conventions that must be accounted for in the NRFU interview. To the extent that the U.S. has experienced an influx of English-speaking immigrants from other social contexts (West African and Caribbean in particular) in which other meta-communicative and social interaction conventions operate, it is recommended that these communities too should be the subject of empirical investigation comparable to that conducted in LEP/NES communities of language.

23. *English-speaking Nonresponse Followup respondents*

As a result of this research design a significant amount of primary data on English-speaking NRFU respondents (the control group) has been accumulated. Though generated as a control group for comparative purposes in this study this unique corpus of data holds the potential for being analytically mined to speak to other questions as well. Not least of these may be the behavior, challenges, and issues associated with the segment of the English-speaking population that are (by definition) least responsive to the mail in prompt, and that most likely includes the

most reluctant, hostile, and non-responsive elements of the mainstream English-speaking population.

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9 REFERENCES

Agar, M. (1996). *The Professional Stranger: An informal Introduction to Ethnography.* NY: Academic Press.

Ajrouch, K. J. (1999). Family and Ethnic Identity in an Arab American Community. In M. Suleiman (Ed.) *Arabs in America: Building a New Future* (pp. 129-139) Philadelphia: Temple University Press.

Ajrouch, K. J. (2004) Gender, Race, and Symbolic Boundaries: Contested spaces of identity among Arab-American adolescents. *Sociological Perspectives, 47*, 371-391.

Ajrouch, K., Y. Pan, and S. Lubkemann. (2012). "Observing Census Enumeration of Non-English Speaking Households in the 2010 Census: Arabic Report" Center for Survey Measurement Research Report. U.S. Census Bureau. Research and Methodology Directorate, Center for Survey Measurement Research Report Series (Survey Methodology #2012-05). U.S. Census Bureau. Available online at <http://www.census.gov/srd/papers/pdf/rsm2012-05.pdf>.

Amaro, H., and R. E. Zambrana. (2000). Criollo, mestizo, mulatto, LatiNegro, indigena, white, or black? The U.S. Hispanic population and multiple responses in the 2000 census. *American Journal of Public Health, 90*(11), 1724-1727.

Bates, N., and Y. Pan. (2009). "Motivating Non-English-Speaking Populations for Census and Survey Participation." In *Proceedings for the 2009 Conference for the Federal Committee on Statistical Methodology, Washington, DC.*

Bates, N., E. A. Martin, T. J. DeMaio, and M. de la Puente. (2006). Questionnaire effects on measurements of race and Spanish origin. *Research report series – Survey methodology #2006-12*. Washington, DC: U.S. Census Bureau.

Bian, Y. J. (1997). "Bringing Strong Ties Back In: Indirect Ties, Network Bridges, and Job Searches in China." *American Sociological Review* 62, 366-385.

Braun, M. (2003). Errors in Comparative Survey Research, in J. A. Harkness, F. J. R. Van de Vijver, and P. Mohler (eds.), *Cross Cultural Survey Methods,* pp 137-142. Hoboken, NJ: Wiley.

Brenner, M. (1982). Response-effects of 'role-restricted' characteristics of the interviewer, in W. Dijkstra and J. van der Zouwen (eds.), *Response Behavior in the Survey Interview*. Pp. 131-165. London: Academic.

Briggs, C. (1986). *Learning How to Ask: A Sociolinguistic Appraisal of the Role of the Interview in Social Science Research*. Cambridge: Cambridge University Press.

Caldwell, K. L. (2007). *Negras in Brazil Re-envisioning Black women, Citizenship and the Politics of Identity*. New Brunswick, NJ: Rutgers University Press.

Chan, A., and Y. Pan. (2011). The Use of Cognitive Interviewing to Explore the Effectiveness of Advance Supplemental Materials among Five Language Groups. *Field Methods, 23(4),* 342-361.

Chen, X. P. and C. Chen. (2004). On the Intricacies of the Chinese *Guanxi*: A Process Model of *Guanxi* Development. *Asia Pacific Journal of Management* 21, 305-324.

Childs, J. H. and P. L. Goerman. (2010). "Bilingual Questionnaire Evaluation and Development through Mixed Pretesting Methods: The Case of the U.S. Census Nonresponse Followup Instrument." *Journal of Official Statistics,* Vol. 26, No. 3.

Childs, J. H., and N. Jurgenson. (2011). Behavior Coding of the 2010 Nonresponse Followup (NRFU) Interviews Report. 2010 Census Program for Evaluations and Experiments. 2010 Census Planning Memoranda Series Memo #150.

Couper, M. P. (1997). Survey Introduction and Data Quality. *Public Opinion Quarterly, 61, 317-338.*

Couper, M. P. and E. D. de Leeuw. (2003). Nonresponse in Cross-Cultural and Cross-National surveys, in J. A. Harkness, F. J. R. Van de Vijver, and P. Mohler (eds.), *Cross Cultural Survey Methods*, pp 157-178. Hoboken, NJ: Wiley.

Couper, M. P., and R. M. Groves. (1992). The Role of the Interviewer in Survey Participation. *Survey Methodology* 18:263-277.

Couper, M. P., and R. M. Groves. (2002). Introductory Interactions in Telephone Surveys and Nonresponse in D. W. Maynard, H. Houtkoop-Steenstra, N. C. Schaeffer, and J. van der Zouwen (eds.), *Standardiztion and Tacit Knowledge: Interaction and Practice in the Survey Interview*, pp. 161-178. New York: Wiley.

de la Puente, M. (1993). Why are People Missed or Erroneously Enumerated in the Census: A Summary of Findings from Ethnographic Research. *Proceedings of the 1993 Research Conference on Undercounted Ethnic Populations*, pp. 29-66.

de la Puente, M., and D. Stemper. (2003). The Enumeration of Colonias in Census 2000: Perspectives of Ethnographers and Census Enumerators. Census 2000 Evaluation J.4: Ethnographic Studies, September 22, 2003. http://www.census.gov/pred/www/rpts/J.4.pdf

de la Puente, M., J. E. Hunter, and M. Salo. (2003). Comparative Ethnographic Research on Mobile Populations. Census 2000 Evaluation J.3: Ethnographic Studies. July 17, 2003. http://www.census.gov/pred/www/rpts/J.3.pdf

Eastman, C. M. and T. Reese. (1981). Associated Language: How Language and Ethnic Identity are Related. *General Linguistics, 21(2),* 109-116.

Elias-Olivares, L., and M. Farr. (1991). Sociolinguistic analysis of Mexican-American patterns of nonresponse to census questionnaires. *Ethnographic exploratory research, report #16*. Washington, DC: Center for Survey Methods Research, Bureau of the Census. Retrieved from http://www.census.gov/srd/papers/pdf/ex91-16.pdf

Farh, J.-L., A. S. Tsui, K. Xin, and B. S. Cheng. (1998). The Influence of Relational Demography and Guanxi: The Chinese Case. *Organization Science* 9(4), 471-488.

Fikes, K. (2009). *The Citizen-Migrant Distinction*. Durham, NC: Duke University Press.

Gerber, E. (1994). Respondents' Understanding of Residence Terminology in Cognitive Research and in the Living Situation Survey. Bureau of the Census 1994 Annual Research Conference, March 20-23, 434-49.

Gerber, E. R., and M. Crowley. (2005). *Report on cognitive testing of a shortened sequence of Hispanic origin, race and modified ancestry questions: Content development for the 2005 National Content Test*. Suitland, MD: U.S. Census Bureau.

Goerman, P., R. Caspar, M. Sha, G. McAvinchey, and R. Quiroz. (2007a), "Census Bilingual Questionnaire Research Final Round 1 Report," U.S. Census Bureau, Washington DC, February 27, 2007.

Goerman, P., R. Caspar, M. Sha, G. McAvinchey, and R. Quiroz. (2007b), "Census Bilingual Questionnaire Research Final Round 2 Report," U.S. Census Bureau, Washington DC, October 21, 2007.

Goerman, P. L. and R. A. Caspar. (2010) "A preferred approach for the cognitive testing of translated materials: testing the source version as a basis for comparison," *International Journal of Social Research Methodology*, 13: 4, Pp.303 – 316.

Goffman, E. (1967). *Interaction Ritual: Essays on Face-to-Face Behavior.* NY: Anchor Books.

Goffman, E. (1974). *Frame Analysis: An Essay on the Organization of Experience.* London: Harper and Row.

Grieco, E. M., and R. C. Cassidy. (2001). *Overview of race and Hispanic origin: Census 2000 brief*. Washington, DC: Economics and Statistics Administration, Census Bureau.

Groves, R. M., and M. P. Couper. (1996). Contact-level Influences on Cooperation in Face-to-face Surveys. *Journal of Official Statistics, 12, 63-83.*

Groves, R. M., and M. P. Couper. (1998). *Nonresponse in Household Interview Surveys.* New York: Wiley.

Gualtieri, S. (2001). Becoming 'White': Race, Religion and the Foundations of Syrian/Lebanese Ethnicity in the United States. *Journal of American Ethnic History,* 20(4), 29-58.

Gumperz, J. (1982). Introduction: Language and the Communication of Social Identity. In J. Gumperz (Ed.), *Language and Social Identity.* Cambridge: Cambridge University Press.
Halter, M. (1993). *Between Race and Ethnicity, Capeverdean American Immigrants 1860-1965.* Chicago, IL: University of Illinois Press.

Harkness, J. A. (2003). Questionnaire Translation. in J. A. Harkness, F. J. R. Van de Vijver, and P. Mohler (eds.), *Cross Cultural Survey Methods,* pp 35-56. Hoboken, NJ: Wiley.

Hammersley, M. (1992). *What's Wrong with Ethnography? Methodological Explorations*. London and NY: Routledge.

Houtkoop-Steenstra, H. (2000). *Interaction and Standardized Survey Interview: The Living Questionnaire.* Cambridge: Cambridge University Press.

Hymes, D. (1972). "Models of the Interaction of Language and Social Life." In J. Gumperz and D. Hymes (eds.) *Directions in Sociolinguistics: The Ethnography of Communication*. NY: Holt, Rinehart and Winston.

Isabelli, C., Y. Pan, and S. Lubkemann. (2012). "Observing Census Enumeration of Non-English Speaking Households in the 2010 Census: Spanish Report." Research and Methodology Directorate, Center for Survey Measurement Research Report Series (Survey Methodology #2012-06). U.S. Census Bureau. Available online at <http://www.census.gov/srd/papers/pdf/rsm2012-06.pdf>.

Isurin, L. (2011). Russian Diaspora: Culture, Identity and Language Change. Berlin: Walter de Gruyter.

Isurin, L., Y. Pan, and S. Lubkemann. (2012). "Observing Census Enumeration of Non-English Speaking Households in the 2010 Census: Russian Report" Center for Survey Measurement Research Report. U.S. Census Bureau.

Kim, B. C., and E. Ryu. (2005). Korean families. In M. McGoldrick, J. Giordano, and N. Garcia-Preto (Eds.), *Ethnicity and family therapy* (pp. 349-362). NY: Guilford Press.

Kim, J., and J. Zapata. (2012). "2010 Census: Language Program Assessment Report." 2010 Census Program for Evaluations and Experiments. 2010 Census Planning Memoranda Series #204. Washington, D.C.: Bureau of the Census.

Kissam, E., E. Herrera, and J. M. Nakamoto. (1993). *Hispanic response to census enumeration forms and procedures.* Report submitted to the Census Bureau. Washington, D.C.: Bureau of the Census.

Lubkemann, S. C. (2004). "Situating Migration in Wartime and Post-War Mozambique: A Critique of Forced Migration Research." in S. Szreter, A.Dharmalingam, and H.Sholkamy (eds.) *Categories and Contexts: Anthropological Studies in Critical Demography--IUSSP Studies in Social Demography*. Oxford: Oxford University Press.

Maltz, D. N., and R. A. Borker. (1982). A Cultural approach to male-female communication. In J. Gumperz (ed.) *Language and Social Identity.* Cambridge: Cambridge University Press.

Martin, E. (2007). Strength of Attachment: Survey Coverage of People with Tenuous Ties to Residences. *Demography*, 44(2), 427-440.

Martin, E., and E. Gerber. (2006). "Methodological Influences on Comparability of Race Measurements: Several Cautionary Examples." Statistical Research Division. U.S. Census Bureau.

Maynard, D. (1988). Language Interaction and Social Problems. *Social Problems,* 35(4), 311-323.

Maynard, D. W., and N. C. Schaeffer. (2002a). Opening and Closing the Gate: The Work of Optimism in Recruiting Survey Respondents, in D. W. Maynard, H. Houtkoop-Steenstra, N. C. Schaeffer, and J. van der Zouwen (eds.), *Standardiztion and Tacit Knowledge: Interaction and Practice in the Survey Interview*, pp. 179-204. New York: Wiley.

Maynard, D. W., and N. C. Schaeffer. (2002b). Refusal Conversion and Tailoring, in D. W. Maynard, H. Houtkoop-Steenstra, N. C. Schaeffer, and J. van der Zouwen (eds.), *Standardiztion and Tacit Knowledge: Interaction and Practice in the Survey Interview*, pp. 179-204. New York: Wiley.

Maynard, S. K. (2002). Linguistic Emotivity: Centrality of Place, the Topic-comment dynamic and an Ideology of Pathos in Japanese discourse. NY: John Benjamins Publishing.

Moore, R. J. and D. W. Maynard. (2002). Achieving Understanding in the Standardized Survey Interviews: Repair Sequences, in D. W. Maynard, H. Houtkoop-Steenstra, N. C. Schaeffer, and J. van der Zouwen (eds.), *Standardiztion and Tacit Knowledge: Interaction and Practice in the Survey Interview*, pp. 281-312. New York: Wiley.

Meintel, D. (1984). *Race, Culture, and Portuguese Colonialism in Cabo Verde.* Syracuse, NY: Syracuse University, Maxwell School of Citizenship and Public Affairs.

Morton-Williams, J. (1993). *Interviewer Approaches.* Aldershot: Dartmout.

Pan, Y. (2007). The Role of Sociolinguistics in the Development and Conduct of Federal Surveys. In *Statistical Research Division's Research Report Series (Survey Methodology #2007-1).* Washington, DC: U.S. Census Bureau.

Pan, Y. (2006). The Use of Interpreters in the Conduct of Household Surveys: Development of U.S. Census Bureau Interpretation Guidelines. In J. Harkness (Ed.). *Conducting Cross-National and Cross-Cultural Surveys, ZUMA Special Issue,* 12, 91-99.

Pan, Y. (2008). Cross-cultural Communication Norms and Survey Interviews. In Sun, H. and Kádár, D. (eds.), *It's the Dragon's Turn – Chinese Institutional Discourse(s),* 17-76. Berne: Peter Lang.

Pan, Y., and M. de la Puente. (2005). Census Bureau Guideline for the Translation of Data Collection Instruments and Supporting Materials: Documentation on How the Guideline Was Developed. In *Statistical Research Division's Research Report Series (Survey Methodology #2005-06).* Washington, DC: U.S. Census Bureau. http://www.census.gov/srd/www/byname.html#panyuling

Pan, Y., and D. Z. Kádár. (2011). *Politeness in Historical and Contemporary Chinese.* London/New York: Continuum.

Pan, Y. and M. Fond. (2010). Developing Multilingual Questionnaires: A Sociolinguistic Perspective. In *Proceedings of the 2010 Joint Statistical Meetings,* Alexandria, VA: American Statistical Association.

Pan, Y., and A. Landreth. (2009). Conveying Translated Informed Consent Concepts: Effects of Language and Culture on Interpretation of Legally Required Messages. In *Joint Statistical Meeting Proceedings,* Alexandria, VA: American Statistical Association.

Pan, Y., B. Craig, and R. Scollon. (2005). Results from Chinese Cognitive Interviews on the Census 2000 Long Form: Language, Literacy, and Cultural Issues. In *Statistical Research Division's Research Report Series (Survey Methodology #2005-09).* Washington, DC: U.S. Census Bureau.

Pan, Y., M. Sha, A. Schoua-Glusberg, and H. Park. (2009). 2010 Census Language Program: Pretesting of Census 2010 Questionnaire in Five Languages. In *Statistical Research Division's Research Report Series (Survey Methodology #2009-01).* Washington, DC: U.S. Census Bureau.

Pires-Hester, L. J. (1999). The Emergence of Bilateral Diaspora Ethnicity Among Capeverdean-Americans. In I. Okpewho et al. (Eds.), *The African Diaspora* (pp. 85-503). Bloomington, IN: Indiana University Press.

Prewitt, K. (2005). Racial classification in America: Where do we go from here? *Daedalus*, 5-17.

Rodrigues, I. P. B. F. (2005). Our Ancestors Came from Many Bloods: Gendered Narrations of a Hybrid Nation. *Revue Lusotopie XII, 1(2),* 217-233.

Rodrigues, I. P. B. F. (2003). Islands of Sexuality: Theories and Histories of Creolization. *International Journal of African Historical Studies, 36(1),* 83-103.

Rodrigues, I., Y. Pan, and S. Lubkemann. (2012). Observing Census Enumeration of Non-English Speaking Households in the 2010 Census: Portuguese Report. Center for Survey Measurement Research Report. U.S. Census Bureau.

Sacks, H. (1992). *Lectures on Conversation,* Vols. I and II. Cambridge, MA: Blackwell.

Samhan, H. H. (1999). Not quite white: Racial classification and the Arab-American experience. In M. W. Suleiman (Ed.), *Arabs in America: Building a New Future* (pp. 209-226). Philadelphia: Temple University Press.

Sanchez, G. (2005). Contested Identities: Narratives of Race and Ethnicity in the Cape Verdean Diaspora. Vol 12, Issue 3, pp.405-438.

Schaeffer, N. (1991). Conversation with a Purpose -- or Conversation? Interaction in the Standardized Interview, in P. P. Biener, R. M. Groves, L. E. Lyberg, N. A. Mathiowetz, and S. Sudman (eds.), *Measurement Errors in Surveys,* pp. 367-392. New York: Wiley.

Schaeffer, N. C., and D. W. Maynard. (2002). Occasions for Intervention: Interactional Resources for Comprehension in Standardized Survey Interviews, in D. W. Maynard, H. Houtkoop-Steenstra, N. C. Schaeffer, and J. van der Zouwen (eds.), *Standardiztion and Tacit Knowledge: Interaction and Practice in the Survey Interview*, pp 261-280. New York: Wiley.

Schieffelin, B. B. and E. Ochs. (Eds.). (1986). *Language Socialization Across Cultures.* Cambridge: Cambridge University Press.

Schegloff, E. A. (1997). Practices and Actions: Boundary Case of Other-initiated Repair. *Discourse Processes* 23:499-547.

Schegloff, E. A. (2002). Survey Interviews as Talk-in-interaction, in D. W. Maynard, H. Houtkoop-Steenstra, N. C. Schaeffer, and J. van der Zouwen (eds.), *Standardiztion and Tacit Knowledge: Interaction and Practice in the Survey Interview*, pp 151-160. New York: Wiley.

Schegloff, E., G. Jefferson, and H. Sacks. (1977). The Preference for Self-correction in the organization of Repair in Conversation. *Language*, 53:361-82.

Schmidley, D., and A. Cresce. (n.d.). Tracking Hispanic ethnicity: Evaluation of current population survey data quality for the question on Hispanic origin, 1971 to 2004. U.S. Census Bureau, Working Paper #80. Retrieved from http://www.census.gov/population/www/documentation/twps0080/twps0080.html

Schoua-Glusberg, A. (1992). *Report on the Translation of the Questionnaire for the National Treatment Improvement, Evaluation Study.* Chicago: National Opinion Research Center.

Schwarz, N. (2003). Culture-Sensitive Context Effects: A Challenge for Cross-Cultural Surveys, in J. A. Harkness, F. J. R. Van de Vijver, and P. Mohler (eds.), *Cross Cultural Survey Methods*, pp93-100. Hoboken, NJ: Wiley.

Schwede, L. (2003). Complex Households and Relationships in the Decennial Studies and in Ethnographic Studies of Six Race/Ethnic Groups. Census 2000 Testing, Experimentation and Evaluation Program Ethnographic Research Report. U.S. Census Bureau. http://www.census.gov/pred/www/rpts/Complex Households Final Report.pdf

Schwede, L., R. Blumberg, and A. Chan. (2006). *Complex Ethnic Households in America*. Lanham, MD: Rowman and Littlefield Publishers, Inc.

Schwede, L., and R. Terry. (forthcoming). Comparative Ethnographic Studies of Enumeration Methods and Coverage in Race/Ethnic Groups.

Shepherd, R., Y. Pan, and S. Lubkemann. (2012). "Observing Census Enumeration of Non-English Speaking Households in the 2010 Census: Chinese Report." Research and Methodology Directorate, Center for Statistical Research and Methodology Research Report Series (Survey Methodology #2012-08). U.S. Census Bureau. Available online at <http://www.census.gov/srd/papers/pdf/rsm2012-08.pdf>.

Silberstein, S. (1988). "Ideology as Process: Gender Ideology in Courtship Narratives." In S. Fisher and A. Todd (eds.) *Discourse and Gender.* Norwood NJ: Ablex Publishing Co.

Sohn, H. (2006). Introduction. In H. Sohn (Ed.), *Korean language in culture and society* (pp. 1-19). Honolulu: University of Hawaii Press.

Suchman , L., and B. Jordan. (1990). "Interactional troubles in face-to-face survey interviews." *Journal of the American Statistical Association,* 85, 232-241.

Suchman , L., and B. Jordan. (1992). "Validity and the Collaborative Construction of Meaning in Face-to-Face Surveys." In J. M. Tanur (ed.), *Questions About Questions: Inquiries into the Cognitive Bases of Surveys*, pp 241-267. New York: Russell Sage.

Tannen, D. (1993). *Framing in discourse.* Oxford: Oxford University Press.

Treat, J., and H. Stackhouse. (2000). "Demographic comparison between self-response and personal visit interview in Census 2000." *Population Research and Policy Review.* Vol. 21:39-51.

Twine, F. W. (1998). *Racism in a Racial Democracy: The Maintenance of White Supremacy in Brazil.* New Brunswick, NJ: Rutgers University Press.

Van de Vijver, F. J.R. (2003). Bias and Equivalence: Cross-Cultural perspectives, in J. A. Harkness, F. J. R. Van de Vijver, and P. Mohler (eds.), *Cross Cultural Survey Methods,* pp143-156. Hoboken, NJ: Wiley.

van der Zouwen, J. (2002). Why Study Interaction in the Survey Interview? Response from a Survey Researcher, in D. W. Maynard, H. Houtkoop-Steenstra, N. C. Schaeffer, and J. van der Zouwen (eds.), *Standardiztion and Tacit Knowledge: Interaction and Practice in the Survey Interview*, pp. 47-66. New York: Wiley.

Viterna, J. S. and D. W. Maynard. (2002). "How Uniform Is Standardization? Variation Within and Across Survey Research Centers Regarding Protocols for Interviewing", in D. W. Maynard,

H. Houtkoop-Steenstra, N. C. Schaeffer, and J. van der Zouwen (eds.), *Standardiztion and Tacit Knowledge: Interaction and Practice in the Survey Interview*, pp 365-400. New York: Wiley.

Walker, S., S. Winder, G. Jackson, and S. Heimel. (2012). "2010 Census Nonresponse Followup Operations Assessment." 2010 Census Program for Evaluations and Experiments. 2010 Census Planning Memoranda Series #190. Washington, D.C.: Bureau of the Census.

Wang, Shuhan C., (2007). "Building societal capital: Chinese in the U.S.", *Language Policy* 6: 27-52.

Yoon, K-E., Y. Pan, and S. Lubkemann. (2012). "Observing Census Enumeration of Non-English Speaking Households in the 2010 Census: Korean Report." Research and Methodology Directorate, Center for Statistical Research and Methodology Research Report Series (Survey Methodology #2012-07). U.S. Census Bureau. Available online at <http://www.census.gov/srd/papers/pdf/rsm2012-07.pdf>

10 APPENDICES

10.1 Appendix A: Observation protocol guide

Observing Census Enumeration of Non-English speaking Households in the 2010 Census
Observation Protocol Guide

E = enumerator, I = interpreter, R = respondent, U=NRFU Study interviewer(s)
Case # _____ Date _____
Language _____ Observer _____
City _____ State _____

Observation	Notes
Interview Setting	
Outside Unit	
• What kind of home/ community is this (e.g. single home, townhouse, apartment, gated community)?	
Inside Unit	
• Where in the home did the interview take place? • How was the location of the interview determined? --what roles did enumerator, respondent, and interpreter play in choosing that location? --did the choice of that location provide any socially or culturally specific indication of how the respondent viewed the interview? How so? --did the process of determining location appear to affect the interview in any way? How so? --did any physical or social aspect of the interview location itself appear to ultimately affect the interview in any way? How so? • What was the seating arrangement (i.e. who sat or stood where, and how close were the E , R, and I to each other)? Was there anything about this arrangement that was socially significant or that affected the interview as a communicative event? Please elaborate. • In what ways did you observe the presence of yourself/the U's affecting the interview?	
Social Actors; and Role and Situation Definition:	
• Who answered the door? • How did E identify him/herself?	

• What was the appearance of E? • How did E introduce the topic of the interaction? • Did R provide any indications that they understood/suspected the interaction had other objectives than those communicated by the E? How did the E respond to these? Were these (or other doubts) about the purpose of the interaction raised throughout the interview? Were these addressed? Based on your knowledge of the community how did any observed expressions of doubts affect the interview process? • Which individual in the household was ultimately designated as the principal respondent? • By what process was the respondent role ultimately determined? (e.g. did other potential respondents opt or get selected out-if so did language play any role? What role did different members of the respondent household, or the enumerator play in this determination?) • Was an Interpreter recruited into the response process? If so at what point in the interview and by whom (E, R, someone else)? • What relationship did the I have to the R? (household member, neighbor, other)? Were there any observable indications that the relationship between I and R affected the interview? If so please elaborate. • Did the person(s) playing the I role change or end up being shared in any way during the course of the interview? If so: --who made the determination to change I? What reasons were given? How was/were other I('s) recruited into this role? --what relationship did the other I(or I's)have to R? Any indications that the relationship between I and R affected the interview? If so elaborate. • Was anyone else other than R, I, E (and U) present during the course of the interview? What roles, or observable effects, did they have on the interview? • Did the E observe or fail to observe any socially or culturally specific conventions of communicative interaction common in this community (including politeness strategies)? In what observable ways did these affect the interview?	
Language/ Communication/	

Intelligibility Management	
• What were the target languages for this interview? • How well did the E communicate in this language? (Explain the basis for your assessment) • What language was interaction initiated in? • If there was no communication at the doorstep, was it a result of incompetence in language or of intentional refusal? • If there was some communication, but language mismatch, how did E identify the language spoken by R? Did E use any language tool kit materials? Did R read the language ID card shown to him/her? Did R find their language? How did R agree to participate? • At which points in the interview (onset, between certain questions), if any, did you observe code-switching at the onset? Who initiated the code switching? What communicative (or other social interaction) issues appeared to occasion code switching? • Amongst the R, I (or Is) and any others present in the interview: --please assess their communicative competency in English; --and in the target language? • At any point was a third "related" language (not English or the target language, but for example Spanish used for a Portuguese speaker) deployed in the interview? If so by whom (E, I, R)? Please assess the effects on communication. • To what extent were written materials produced by the census utilized in the interview? At what points if any did E refer to the language assistance toolkit? • Please assess the literacy of the respondent and/or interpreter in the target language and its effect upon the interview and comprehension • Was there any confusion over specific census questions? If so, which one(s)? What was the nature of that confusion? • Were there any non-verbal cues that E display to engage R (smile, facial expression, gesture, posture)? • Were there any non-verbal cues that R display to show confusion or rejection?	

Interpretation Process	
• Did E verify (each of) the I's linguistic ability/ competence in the target language? If so, what strategies did E use to verify I's language skills? How accurate was the E's assessment of I's communicative competence? • How accurate was the interpreter's translation of Census questions? Which questions/comments were translated on the fly? How accurate was the translation? In what instances did R express confusion over the translation? • Please note any instances in which I added/subtracted/ otherwise modified information from the written interpretation/ or verbally transmitted message by the E. • Did the I ever "lead" the R (i.e. provide the respondent with an answer)? Did the I ever prompt the R to change an answer? Did the I ever change the answer of the R? Please comment on the effects of these dynamics on information transmission during the interview in each occasion of its occurrence. • Instances of Miscommunication Documentation and Analysis: Please identify the most significant moments of miscommunication that occurred in the course of the interview? Were these recognized by the E,I, R? What strategies were used to cope with these instances? To what extent were they effective? • Instances of NO communication Documentation and Analysis: Please identify the most significant moments of no communication. Did R show confusion, and was open and willing to engage, but lack of trust or needed more information. Or did R show absolute refusal and did not want to engage. What strategies were used to cope with these instances? To what extent were they effective?	

10.2 Appendix B: Enumerator debriefing questions

Observing Census Enumeration of Non-English speaking Households in the 2010 Census
Enumerator Debriefing Questions

Information Sought (and Rationale)	**Specific Probe Questions/Approaches (to be developed by each team)**
FACTORS AFFECTING DEFINITION OF SITUATION: CENSUS INTERVIEW EXPERIENCE • Has the enumerator had any prior experience conducting census or survey interviews or in the US? • Was there any difference between the last/ previous time(s) and this time? In particular: --How did the use of written materials in the target language make any difference in their work with the target population (if at all)? And/or --How did the recruitment and use of an interpreter affect the process in this time as compared to previous time(s)? • Did they find the enumerator training adequate and useful for their work?	
FACTORS AFFECTING THEIR WITH INTERACTION WITH RESPONDENTS • What did they think were the most challenging aspects of their work? • How did they cope with reluctant respondents? • Did they find it more difficult to interview Rs who languages other than English? • Did they find language was a major barrier in their interaction with respondents or other factors? • What did they think were the useful strategies to deal with reluctant respondents?	
FACTORS AFFECTING THE INTERVIEW PROCESS AS A COMMUNICATIVE EVENT: • Did they feel comfortable with the interpreter that was recruited and the process of their recruitment? In what	

ways, if any, did they feel the interpreter facilitated or otherwise affected the interview process? • How did they find an interpreter and verify the interpreter's language ability in a language that they themselves didn't speak? • Did the use of census printed material (in target language) facilitate or otherwise affect their conduct of the interview? • Were there any points at which they felt confusion about the census questions or process (open ended)? What was the source of that confusion? Do they feel that it was adequately resolved? If not what would have helped resolve it?	

10.3 Appendix C: Respondent debriefing questions

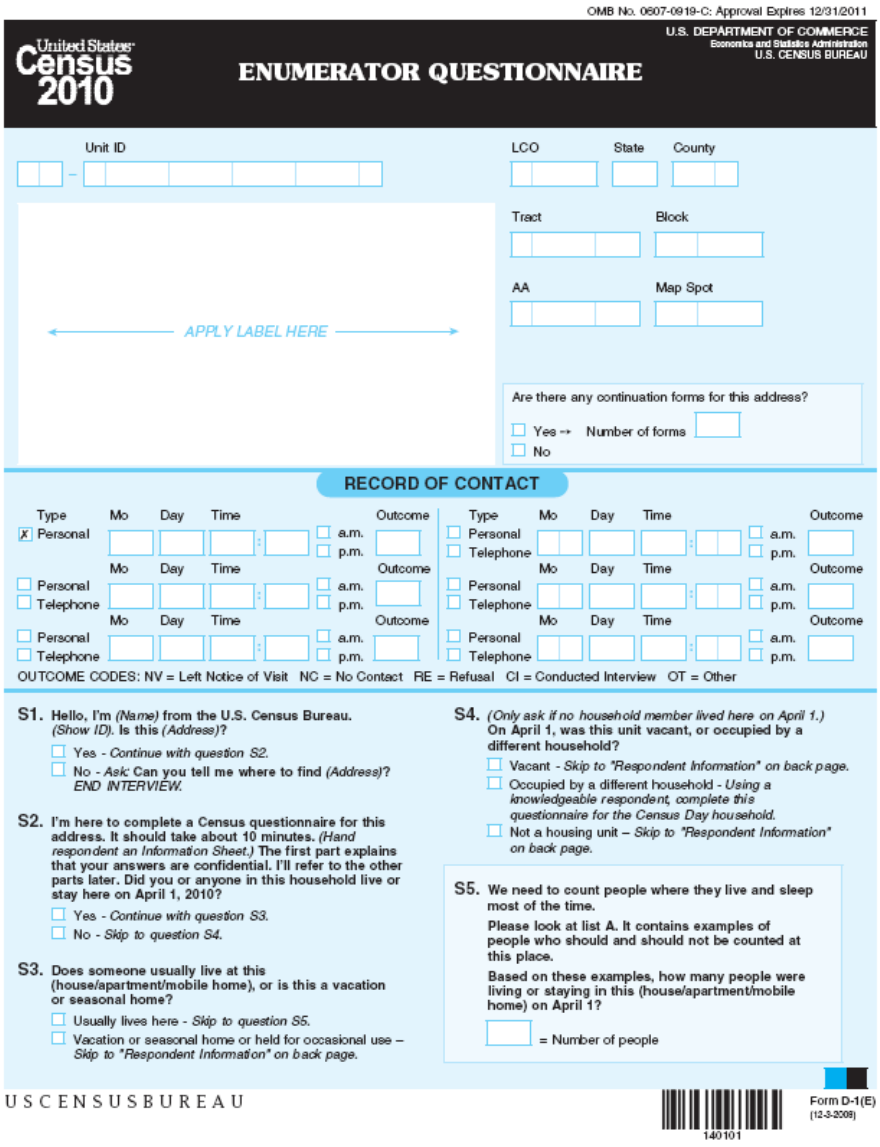
Observing Census Enumeration of Non-English speaking Households in the 2010 Census
Respondent Debriefing Questions

Information Sought (and Rationale)	**Specific Probe Questions/Approaches (to be developed and translated by each team: only one or two probes for each category)**
FACTORS AFFECTING DEFINITION OF SITUATION I: CENSUS EXPERIENCE • Has the respondent had any prior experience with the census process in the US? • Was there any difference between the last/ previous time(s) and this time? • In particular: • How did the use of written materials in the target language make any difference in their comprehension of the process and questions (if at all)? • And/or • How did the recruitment and use of a translator affect the process in this time as compared to previous time(s)?	
FACTORS AFFECTING DEFINITION OF SITUATION II: VIEWS OF "OFFICIAL" (GOV-SPONSORED) ACTIVITY • Did they understand the census to be a US government-related activity or as something else? • If they understood it as being government related how did that affects their participation? The types of concerns or beliefs we are interested in would include: • Census is used… To decide how much money communities will get from the government. To decide how many representatives each state will have in Congress. To count both citizens and non-citizens? To determine property taxes? To help the police and FBI keep track of people who break the law To help businesses and governments plan for the future	

To locate people living in the country illegally. The census is an invasion of privacy I was concerned that the information I provided might be misused. My answers to the Census could be used against me. Answering and sending back the Census matters for my family and community. I just don't see that it matters much if I personally fill out the Census form or not. It takes too long to fill out the Census information, I don't have time. • If they regarded the Census as unrelated to government activity, what did they understand it to be about, and based on what information received from whom? • What if any experience has the respondent had with being surveyed or interviewed in the US for purposes other than the census? • What are the Respondents' beliefs about the purposes are for the information collected for /by the census? Do they have strong suspicions it could be put to purposes other than those stated—and if so with which ones are they concerned? • How did any of these specific concerns affected their answers (if at all)? How could these concerns have been addressed?	
FACTORS AFFECTING DEFINITION OF SITUATION III : OTHER SURVEY/ INTERVIEW EXPERIENCE • What if any experience has the respondent had with being surveyed or interviewed in the US for purposes other than the census? • What experience have they had in their home country with being interviewed and being enumerated? How does this affect their current perceptions and interactions with the Enumerator?	
CENSUS TECHNICAL PROCESS ISSUES • *Mail Handling:* We'd like to know how Linguistic Isolated Households (LI HHs) handle mail and how it affects the way they are contacted and approached. This will shine light on how	

LI HHs treat/handle census forms and how they will be contacted and approached by NRFU and NORC evaluation project	
• *Media consumption:* We'd like to understand what kinds of media LI HHs consume and in what language. This will help understand whether they are exposed to the campaign in general and through the in-language campaign in particular	
• *Reasons for not mailing back the Census Form*	
• *Intelligibility /Access to Census Campaign Message:* We'd like to know whether LI HHs are exposed to the different elements of the Census campaign (paid media, community contacts, Census in Schools, and earned media) and what they learned about the Census through these campaign elements PAID MEDIA PARTNERSHIPS/COMMUNITY CONTACTS CENSUS IN SCHOOLS PROGRAM EARNED MEDIA CRITICAL INFO. SOURCES	
FACTORS AFFECTING THE INTERVIEW PROCESS AS A COMMUNICATIVE EVENT: • Did they feel comfortable with the interpreter that was recruited and the process of their recruitment? In what ways, if any, did they feel the interpreter facilitated or otherwise affected the interview process? • Did the use of census printed material (in target language) facilitate or otherwise affect their comprehension of the interview? • Were there any points at which they felt confusion about the census questions or process (open ended)? What was the source of that confusion? Do they feel that it was adequately resolved? If not what would have helped resolve it? • Did the Enumerator either violate or enact any communicative conventions (politeness rules etc…)that either facilitated or hindered the interview?	

10.4 Appendix D: The 2010 Census NRFU Questionnaire



OMB No. 0607-0919-C: Approval Expires 12/31/2011

United States Census 2010

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

ENUMERATOR QUESTIONNAIRE

Unit ID – | LCO | State | County

Tract | Block

AA | Map Spot

APPLY LABEL HERE

Are there any continuation forms for this address?
☐ Yes → Number of forms
☐ No

RECORD OF CONTACT

Type	Mo	Day	Time		Outcome	Type	Mo	Day	Time		Outcome
☒ Personal			:	☐ a.m. ☐ p.m.		☐ Personal ☐ Telephone			:	☐ a.m. ☐ p.m.	
☐ Personal ☐ Telephone			:	☐ a.m. ☐ p.m.		☐ Personal ☐ Telephone			:	☐ a.m. ☐ p.m.	
☐ Personal ☐ Telephone			:	☐ a.m. ☐ p.m.		☐ Personal ☐ Telephone			:	☐ a.m. ☐ p.m.	

OUTCOME CODES: NV = Left Notice of Visit NC = No Contact RE = Refusal CI = Conducted Interview OT = Other

S1. Hello, I'm *(Name)* from the U.S. Census Bureau. *(Show ID).* Is this *(Address)*?
☐ Yes - *Continue with question S2.*
☐ No - *Ask:* Can you tell me where to find *(Address)*? *END INTERVIEW.*

S2. I'm here to complete a Census questionnaire for this address. It should take about 10 minutes. *(Hand respondent an Information Sheet.)* The first part explains that your answers are confidential. I'll refer to the other parts later. Did you or anyone in this household live or stay here on April 1, 2010?
☐ Yes - *Continue with question S3.*
☐ No - *Skip to question S4.*

S3. Does someone usually live at this (house/apartment/mobile home), or is this a vacation or seasonal home?
☐ Usually lives here - *Skip to question S5.*
☐ Vacation or seasonal home or held for occasional use – *Skip to "Respondent Information" on back page.*

S4. *(Only ask if no household member lived here on April 1.)* On April 1, was this unit vacant, or occupied by a different household?
☐ Vacant - *Skip to "Respondent Information" on back page.*
☐ Occupied by a different household - *Using a knowledgeable respondent, complete this questionnaire for the Census Day household.*
☐ Not a housing unit – *Skip to "Respondent Information" on back page.*

S5. We need to count people where they live and sleep most of the time.
Please look at list A. It contains examples of people who should and should not be counted at this place.
Based on these examples, how many people were living or staying in this (house/apartment/mobile home) on April 1?
☐ = Number of people

USCENSUSBUREAU

140101

Form D-1(E)
(12-3-2009)

1. Let's make a list of all those people. Please start with the name of an owner or renter who was living here on April 1. Otherwise, start with any adult living here.	2. Please look at list B on the Information Sheet. How is *(Name)* related to *(Read name of Person 1)*? *Mark [X] ONE box.*	3. Is *(Name)* male or female? *Mark [X] ONE box.*	4. What was *(Name's)* age on April 1, 2010? What is *(Name's)* date of birth? *Please report babies as age 0 when the child is less than 1 year old.* *Print numbers in boxes.*
Person 1 First Name / MI Last Name	[X] Person 1	☐ Male ☐ Female	Age on April 1, 2010 DATE OF BIRTH Month Day Year of birth
Person 2 First Name / MI Last Name	☐ Husband or wife ☐ Biological son or daughter ☐ Adopted son or daughter ☐ Stepson or stepdaughter ☐ Brother or sister ☐ Father or mother ☐ Grandchild ☐ Parent-in-law ☐ Son-in-law or daughter-in-law ☐ Other relative ☐ Roomer or boarder ☐ Housemate or roommate ☐ Unmarried partner ☐ Other nonrelative	☐ Male ☐ Female	Age on April 1, 2010 DATE OF BIRTH Month Day Year of birth
Person 3 First Name / MI Last Name	☐ Husband or wife ☐ Biological son or daughter ☐ Adopted son or daughter ☐ Stepson or stepdaughter ☐ Brother or sister ☐ Father or mother ☐ Grandchild ☐ Parent-in-law ☐ Son-in-law or daughter-in-law ☐ Other relative ☐ Roomer or boarder ☐ Housemate or roommate ☐ Unmarried partner ☐ Other nonrelative	☐ Male ☐ Female	Age on April 1, 2010 DATE OF BIRTH Month Day Year of birth
Person 4 First Name / MI Last Name	☐ Husband or wife ☐ Biological son or daughter ☐ Adopted son or daughter ☐ Stepson or stepdaughter ☐ Brother or sister ☐ Father or mother ☐ Grandchild ☐ Parent-in-law ☐ Son-in-law or daughter-in-law ☐ Other relative ☐ Roomer or boarder ☐ Housemate or roommate ☐ Unmarried partner ☐ Other nonrelative	☐ Male ☐ Female	Age on April 1, 2010 DATE OF BIRTH Month Day Year of birth
Person 5 First Name / MI Last Name	☐ Husband or wife ☐ Biological son or daughter ☐ Adopted son or daughter ☐ Stepson or stepdaughter ☐ Brother or sister ☐ Father or mother ☐ Grandchild ☐ Parent-in-law ☐ Son-in-law or daughter-in-law ☐ Other relative ☐ Roomer or boarder ☐ Housemate or roommate ☐ Unmarried partner ☐ Other nonrelative	☐ Male ☐ Female	Age on April 1, 2010 DATE OF BIRTH Month Day Year of birth

Form D-1(E) (12-3-2008)

5. Please look at List C. Is *(Name)* of Hispanic, Latino, or Spanish origin?

Read if necessary:

Examples of another Hispanic, Latino, or Spanish origin include Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.

- ☐ No, not of Hispanic, Latino, or Spanish origin
- ☐ Yes, Mexican, Mexican American, Chicano
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, another Hispanic, Latino, or Spanish origin – What is that origin?

6. Please look at List D and choose one or more races. For this census, Hispanic origin is not a race. What is *(Name's)* race?

Read if necessary:

Examples of other Asian groups include Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.

Examples of other Pacific Islander groups include Fijian, Tongan, and so on.

- ☐ White
- ☐ Black, African American, or Negro
- ☐ American Indian or Alaska Native — What is the name of the enrolled or principal tribe?
- ☐ Asian Indian
- ☐ Chinese
- ☐ Filipino
- ☐ Japanese
- ☐ Korean
- ☐ Vietnamese
- ☐ Other Asian — What is that group?
- ☐ Native Hawaiian
- ☐ Guamanian or Chamorro
- ☐ Samoan
- ☐ Other Pacific Islander — What is that group?
- ☐ Some other race — What is that group? →

7. Does *(Name)* sometimes live or stay somewhere else for any of these reasons? –

Read response categories.

Mark [X] all reasons that apply.

- ☐ In college housing
- ☐ In the military
- ☐ At a seasonal or second residence
- ☐ For child custody
- ☐ In jail or prison
- ☐ In a nursing home
- ☐ For another reason
- ☐ No

5. Please look at List C. Is *(Name)* of Hispanic, Latino, or Spanish origin?

Read if necessary:

Examples of another Hispanic, Latino, or Spanish origin include Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.

- ☐ No, not of Hispanic, Latino, or Spanish origin
- ☐ Yes, Mexican, Mexican American, Chicano
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, another Hispanic, Latino, or Spanish origin – What is that origin?

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- ☐ Korean
- ☐ Vietnamese
- ☐ Other Asian — What is that group?
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- ☐ Guamanian or Chamorro
- ☐ Samoan
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- ☐ At a seasonal or second residence
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- ☐ In jail or prison
- ☐ In a nursing home
- ☐ For another reason
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- ☐ In the military
- ☐ At a seasonal or second residence
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- ☐ In jail or prison
- ☐ In a nursing home
- ☐ For another reason
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- ☐ Yes, Cuban
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- ☐ Other Asian — What is that group?
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Mark [X] all reasons that apply.

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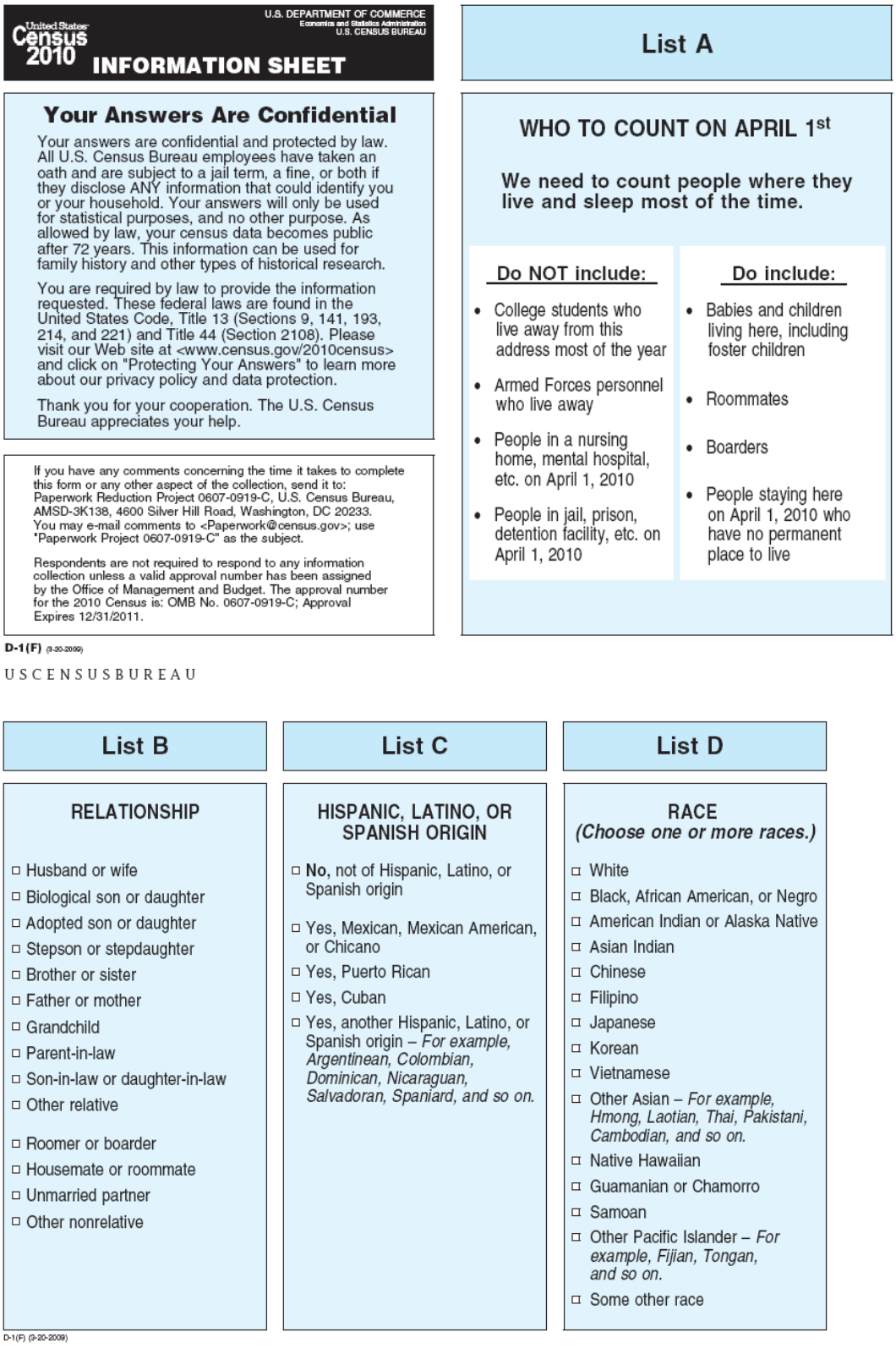
- ☐ At a seasonal or second residence
- ☐ For child custody
- ☐ In jail or prison
- ☐ In a nursing home
- ☐ For another reason
- ☐ No

10.5 Appendix E: The 2010 Census NRFU Information Sheet



United States Census 2010

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

INFORMATION SHEET

Your Answers Are Confidential

Your answers are confidential and protected by law. All U.S. Census Bureau employees have taken an oath and are subject to a jail term, a fine, or both if they disclose ANY information that could identify you or your household. Your answers will only be used for statistical purposes, and no other purpose. As allowed by law, your census data becomes public after 72 years. This information can be used for family history and other types of historical research.

You are required by law to provide the information requested. These federal laws are found in the United States Code, Title 13 (Sections 9, 141, 193, 214, and 221) and Title 44 (Section 2108). Please visit our Web site at <www.census.gov/2010census> and click on "Protecting Your Answers" to learn more about our privacy policy and data protection.

Thank you for your cooperation. The U.S. Census Bureau appreciates your help.

If you have any comments concerning the time it takes to complete this form or any other aspect of the collection, send it to: Paperwork Reduction Project 0607-0919-C, U.S. Census Bureau, AMSD-3K138, 4600 Silver Hill Road, Washington, DC 20233. You may e-mail comments to <Paperwork@census.gov>; use "Paperwork Project 0607-0919-C" as the subject.

Respondents are not required to respond to any information collection unless a valid approval number has been assigned by the Office of Management and Budget. The approval number for the 2010 Census is: OMB No. 0607-0919-C; Approval Expires 12/31/2011.

D-1 (F) (3-20-2009)

U S C E N S U S B U R E A U

List A

WHO TO COUNT ON APRIL 1st

We need to count people where they live and sleep most of the time.

Do NOT include:

- College students who live away from this address most of the year
- Armed Forces personnel who live away
- People in a nursing home, mental hospital, etc. on April 1, 2010
- People in jail, prison, detention facility, etc. on April 1, 2010

Do include:

- Babies and children living here, including foster children
- Roommates
- Boarders
- People staying here on April 1, 2010 who have no permanent place to live

List B

RELATIONSHIP

- ☐ Husband or wife
- ☐ Biological son or daughter
- ☐ Adopted son or daughter
- ☐ Stepson or stepdaughter
- ☐ Brother or sister
- ☐ Father or mother
- ☐ Grandchild
- ☐ Parent-in-law
- ☐ Son-in-law or daughter-in-law
- ☐ Other relative

- ☐ Roomer or boarder
- ☐ Housemate or roommate
- ☐ Unmarried partner
- ☐ Other nonrelative

List C

HISPANIC, LATINO, OR SPANISH ORIGIN

- ☐ **No,** not of Hispanic, Latino, or Spanish origin

- ☐ Yes, Mexican, Mexican American, or Chicano
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, another Hispanic, Latino, or Spanish origin – *For example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.*

List D

RACE
(Choose one or more races.)

- ☐ White
- ☐ Black, African American, or Negro
- ☐ American Indian or Alaska Native
- ☐ Asian Indian
- ☐ Chinese
- ☐ Filipino
- ☐ Japanese
- ☐ Korean
- ☐ Vietnamese
- ☐ Other Asian – *For example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.*
- ☐ Native Hawaiian
- ☐ Guamanian or Chamorro
- ☐ Samoan
- ☐ Other Pacific Islander – *For example, Fijian, Tongan, and so on.*
- ☐ Some other race

D-1(F) (3-20-2009)