### "CAN YOU TELL ME HOW TO GET THERE?": NATURALLY-OCCURRING VERSUS ROLE-PLAY DATA IN DIRECTION-GIVING

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#### Abstract

This study takes up the current debate on natural versus elicited data in investigations on speech acts by comparing both types of data in a particular context, that of asking for and giving driving directions. An analysis of route-descriptions offered by male and female direction-givers in both natural and role-play settings revealed only one statistically significant sex-related difference: More male than female participants included mileage estimates in the natural setting but not in the role-play setting. However, when male and female participants' responses were combined to compare natural with role-play direction-giving, the role-play participants exhibited several significantly different linguistic behaviors in terms of their use of verbal devices (e.g., landmarks, mileage estimates, stoplight estimates) throughout the interactional phases. Direction-givers, when acting in an authentic context that carries real-world consequences, unanimously recognized an indirect request for directions while the direction-givers in the role-play setting generally did not. Additionally, this study revealed that the cognitive behaviors and the conventionalization evident in "natural" direction-giving were lacking in the role-play exchanges. Finally, the role-play participants were generally more aware of their role as research participants than as direction-givers, an awareness that affected their linguistic behaviors.

Keywords: Direction-giving; Role-play; Natural data; Elicited data; Route-descriptions; Verbal devices.

#### **1. Introduction**

The debate on natural versus elicited data in investigations on speech acts is not new. It was raging in the early 1980's (Beebe and Cummings 1996) and continues today. Consequently, studies based on both types of data continue to be conducted though linguists have begun to identify more clearly the advantages and disadvantages of each approach.

Much of the work comparing natural versus elicited data has focused on speech acts (apologies, requests, rejections, etc.) that have long been recognized as important areas of investigation for researchers in pragmatics. For example, recently, Demeter (2007) argued for the use of role-play data in the analysis of apologies. His claims regarding the validity of role-plays as a reliable data collection method are based on a comparison of apology role-play data with another form of elicited data, discourse completion tasks (DCTs). Nevertheless, their validity pales when data types from the entire spectrum of elicitation techniques and collection options are included. Demeter also cites previous studies, for example, that of Kasper and Dahl (1991), who situated the observation of authentic discourse at the farthest end of the natural-elicited

continuum evaluating it as, in Demeter's words, "the best way of collecting data on the production of speech acts" (2007: 85).

Other research has also supported the importance of natural data while continuing to affirm a role for other data collection procedures. Félix-Brasdefer's (2007) study, for instance, revealed greater variation in requests collected in natural contexts over those collected in open role-plays. He noted that role-plays are "artificial interactions that *simulate* human social behavior for research purposes and they can hardly be equated to natural human interaction" (2007: 178), adding that natural data give researchers the opportunity to examine interaction in "natural contexts where participants present their intentions with real-world consequences" (2007: 181). However, Félix-Brasdefer also recognized the limitations of relying on naturally-occurring data, highlighting the issue of variable control as one specific challenge. Similarly, Hartford and Bardovi-Harlig's (1992) groundbreaking study of students' rejections of their advisors' advice also concluded that though the use of DCTs can complement other findings, there "should be an increase in observational data in interlanguage pragmatics" (1992: 33).

Since the publication of Kasper and Dahl's (1991) detailed review of 39 studies of interlanguage pragmatics, the debate over the use of DCTs, role-plays and authentic discourse in research has continued, and it will likely remain a point of contention in the foreseeable future. The present study examines this debated issue by comparing natural versus role-play data in one particular context, that of asking for and giving driving directions.

#### 2. Direction-giving and conversational implicature

The present investigation is tied very closely to direct and indirect speech acts in conversation. That is, a request for directions can be stated very directly as in, "Would you tell me how to get to X?" or, given adequate conversational and/or physical context, the same request might also be inferred from the more indirect, "Do you know where X is?". Grice's (1975) proposed maxims of conversation, specifically the Cooperative Principle, apply to communicative exchanges among interlocutors across language and cultural boundaries and have helped explain how interlocutors understand each other even though they do not always say explicitly what they mean. His contribution to understanding conversational interactions consists of the observation that a speaker's utterance is not always uttered or understood on a superficial level but rather is interpreted by listeners who base their interpretation of the statement on a shared acceptance of the four maxims: Quantity, quality, relation and manner. That is, according to his model, what someone says is assumed to be of an appropriate quantity, to be truthful and accurate, to be related to the communicative event and context, and to be delivered in a logical and ordered manner; this set of assumptions result in the utterance being interpreted accordingly.

For example, "...[W]hen one pulls into a gas station and asks, 'How do I get to X?', unstated but nevertheless understood is that the Recipient [of the directions] means 'from here'" (Psathas and Kozloff 1976: 113). According to the Cooperative Principle, the person to whom this question is addressed applies Grice's (1975) maxims of quantity, quality, relation, and manner and recognizes that the driver means "from here" simply because the driver and the direction-giver are both currently "here", and that no other interpretation makes logical sense given the shared context. Admittedly, one could

imagine the surprise of the questioner if the potential direction-giver responded with an unexpected and ridiculous question of his own such as, "Do you want me to tell you how to get to X from my house or from this gas station?". This response would flout the maxim of relation in their shared physical context and would serve as an unexpected obstacle in this routinized communicative exchange.

Psathas and Kozloff's (1976) claim that a direction-giver in this setting understands that such a request implies "from here" was confirmed by an investigation (Ewald 2010) based on Wunderlich and Reinelt's (1982) "interactional scheme". The 60 study participants in that study never once questioned the starting point assumed by the direction-receiver. Their naturally-occurring responses revealed that they simply understood "*Do you know where X is?*" to mean that the one who asked the question, a driver who had approached them in a car, wanted directions to X from where they were; that is, they understood the question to be an indirect request for directions from their present shared location. Imagine again the peculiarity of responses such as, "*Yes, I know where X is. Do you?*"; "*No, why do you ask? Do you work for X?*"; and "*Yes, I do. From my house I take route….*".

#### 3. Previous research on direction-giving

Many previous studies have approached direction-giving from a more cognitive perspective. Researchers have compared, for example, the spatial referents used by male and female direction-givers in their route-descriptions (Harris 1981; Klein 1982; Lawton 2001; Napoleon 2007). Similar to Wunderlich and Reinelt's (1982) interactional scheme were several other formulations of various routinized direction-giving stages (Psathas and Kozleff 1976; Psathas 1986; Scotton and Bernsten 1988; Pearson and Lee 1992; Couclelis 1996; Golding et al. 1996; Allen 2000).

Additionally, some researchers have attempted to correlate the frequency of certain verbal devices (the use of cardinal indicators or mileage estimates, for example) with the sex of the direction-giver. Their results lack uniformity but in general, they found a greater use of landmarks on the part of females than males and more cardinal indicators (north, south, etc.) on the part of males than females (Lawton 2001; Napoleon 2007). However, other studies (Harrell, Bowlby and Hall-Hoffarth 2000; Ewald 2010) did not find gender differences in the direction-givers' use of landmarks. Miller and Santoni (1986) reported that cardinal indicators were used more frequently by college-aged males than females who more often used landmarks. They also found that the male direction-givers' directions were more accurate than those of the females. Ward, Newcombe and Overton (1986) also reported that males made fewer errors than females and found that they included more cardinal indicators and mileage estimates than did females. But, Brown, Lahar and Mosley (1998) found very few overall errors on the part of males or females, and Ewald (2010) found more errors in mileage estimates offered by male participants than by females.

#### 3.1. Natural versus elicited data in direction-giving research

It is worth noting that in most of the studies reviewed in the previous section, the data gathered were elicited through hypothetical or fictitious tasks. For instance, Lawton (2001) studied the direction-giving language of Internet participants who supplied written directions for destinations in their home areas. Thus, though the places were

authentic, the task was imaginary; the direction-givers were asked to provide written directions for a hypothetical friend to a destination that they themselves selected. Similarly, in Napoleon's (2007) study, though the participants were asked to give directions to a real location on their campus, the direction-giving was elicited through an email survey. Harrell, Bowlby and Hall-Hoffarth's (2000) participants drew maps for a hypothetical campus visitor. The direction-giving task for Miller and Santoni's (1986) participants was to study a map of a fictitious town for 10 minutes and then to provide written directions for a pretend best friend. The findings in Ward et al.'s (1986) study on sex-related differences in direction-giving were also based on laboratory-collected data. Finally, Brown et al.'s (1998) findings were elicited through the hypothetical context of giving oral directions to a stranger while looking at a map.

Demeter (2007) noted several limitations of role-plays including unnatural behavior on the part of participants (Jung 2004) and a lack of variable control depending on the type of role-play utilized (a point also discussed by Kasper and Dahl 1991). Cohen (1996), Beebe and Cummings (1996), Demeter (2007), Félix-Brasdefer (2003 and 2007), and others acknowledge that role-plays cannot elicit authentic natural data but emphasize that they do counter some of the recognized disadvantages of naturally-occurring data (e.g., the control of social variables).

In the few previous direction-giving studies that were based on natural data (i.e., data gathered in settings in which participants believed they were providing helpful information to true direction-seekers), the findings are complex and much remains to be investigated. For example, Collett and O'Shea (1976) claimed that it was due to cultural differences in value systems that English participants were less likely than their Iranian counterparts to provide directions to a place that did not actually exist. Mark and Gould (1995) found that when giving driving directions in an authentic context in English, males offered both more mileage estimates than females (8/16 males versus 2/15 females) and more cardinal directions than females (4/16 versus 1/15). Also based on natural data, Pearson and Lee's (1992) study of walking directions found that male direction-givers used more indirect directives than females; but, they claimed that these differences were small and that the gender of the direction-giver is less significant than the gender of the direction-receiver. These findings do not align perfectly with those of the previously-mentioned studies based on role-plays or DCTs.

Another previous study (Ewald 2010) based on natural data confirmed that direction-giving, like other speech acts, is a conventionalized linguistic event (Coulmas 1981; Psathas 1986), characterized by the four phases (initiation, route-description, securing and closure) identified by Wunderlich and Reinelt (1982). Its findings revealed only one statistically significant difference in the directions provided by the 60 male and female participants. Males included a significantly greater number of mileage estimates than did females, but their estimates contained relatively more inaccuracies than those offered by the female direction-givers. Nevertheless, overall, the directions provided by male and female participants were similar in several ways. First, there was little difference in their use of directional indicators (cardinal indicators such as "north, south", and relative indicators such as "right, left"). Additionally, male and female participants included a similar number and type of landmarks in their directions; they both estimated the number of stoplights and the amount of time required for the route they had described. Finally, their inclusion of road names and highway numbers was virtually identical. Both males and females made many mistakes in their directions, and the overall frequency of errors for each group was almost equal. Perhaps most notably,

those data confirmed that an indirect speech act carried out in a natural speech context can effectively initiate the direction-giving exchange.

These studies together contribute a detailed understanding of the directiongiving exchange from cognitive, social and linguistic frameworks. But, none of these investigations offers a comparison of direction-giving data taken from both role-play and natural contexts. The present study will enter the current debate of natural versus elicited in the context of giving driving directions at a gas station.

#### 4. The present study

The present investigation responds to Kasper and Dahl's call for "for more authentic data, collected in the full context of the speech event, and for comparative studies of the validity of different elicitation techniques" (1991: 245). It compares the results of two elicitation techniques that provided, respectively, the role-play data previously analyzed in Ewald (2010) and related natural response data collected in the "full context of the speech event", a gas station in which a customer was asked to provide driving directions.

As previously-noted, all 60 participants in the natural context (customers in a gas station) understood "*Do you know where* X *is*?" to be an indirect request for directions and responded accordingly (Ewald 2010). This subsequent study seeks to address the following research questions:

(1) Do interlocutors situated in a gas station interpret an indirect request for directions as such in a driving-direction role-play?

(2) Does the fact that the direction-givers know that they are participating in a study significantly change the nature of the exchanges?

(3) How do these role-play findings compare to those based on the natural setting in terms of sex-related differences?

#### 4.1. Participants and context

This investigation is based on data gathered from two experiments with 2 separate groups of 60 participants, each containing 30 males and 30 females, for a total of 120 participants. The 60 natural interaction (NI) participants in the first experiment provided the naturally-occurring data (first analyzed in Ewald 2010) and the 60 role-playing (RP) participants in the second experiment provided the role-play data; that is, each group provided driving directions in a different data collection context. Both experiments took place outside a fairly large, neighborhood gas station that was generally busy at the time of data collection. Participants, nevertheless, did not interact either with each other or with the researcher in the presence of other participants. They had stopped at the station either to buy fuel at one of the gas station's six double pumps or to make purchases in the attached convenience store. The participants were judged by the researchers to be over age 18 and native speakers of English, two requirements for participation made visually explicit on a poster advertising the second experiment. A research review board approved both experiments. They judged the direction-giving interaction to be a normal part of everyday life and waived the requirement for informed consent to protect the

naturalness of the data (from NI participants) and the anonymity of the participants in both groups (NI and RP).

### 4.1.1. NI Experiment (Ewald 2010)

The researcher and a research assistant collected the data from within the researcher's vehicle. They approached individual participants while they were pumping gas or entering/exiting the convenience store. The driver asked each participant two questions. First, "*Excuse me, are you from around here?*" and second, "*Do you know where X is?*". The research assistant held a cell phone to her ear during these interactions both to force direction-givers to address their comments only to the researcher and also to prevent them from knowing that she was taking notes on the directions they provided. She completed a predesigned form (see Appendix 1) that facilitated both note-taking and recall (Beebe 1994; and Félix-Brasdefer 2007). Following the interaction with each direction-giver, the researchers exited the lot, parked and compared their recollections of the interaction with the notes taken by the research assistant. In the few instances in which their memories of the event and the notes disagreed, they reconciled the notes accordingly.

### 4.1.2. RP Experiment

A few months following the collection of data from the NI group, the researcher and two research assistants set up a small table immediately outside the doors of the same gas station's convenience store. As customers entered or exited the store, most walked near the table. Hanging visibly was a poster that stated the following:

\$2-\$25 Want to earn a [gas station name] gift card in 2-3 minutes? Take part in a short research study that takes 2-3 minutes. Draw one card. Every card has a monetary value. Card values range from \$2.00- \$25.00. The first 60 adults (30 males/ 30 females, over age 18, native English speakers) to respond may participate. You may participate in this study only once.

One research assistant stood nearest the table. When potential participants approached the table or made eye contact with her, she asked, "*Want to earn a free [gas station name] gift card?*". Those customers who said no simply kept walking. If they showed interest in the study or asked any questions, she explained that this was a study on driving directions and asked if they wanted to participate. If they agreed, they were directed to talk to the researcher who was standing a little farther away on the other side of the table. The researcher then explained again that this was a research study on driving directions that would take only a couple of minutes and confirmed that the person did indeed want to participate (following this encounter with the researcher, all 60 agreed to participate).

The researcher explained that she and the participant would have a "hypothetical" or "pretend" conversation that often takes place in gas station parking lots and instructed the participants to respond as they normally would. She then asked the same two questions posed to the NI participants: First, "*Are you from around here?*" and second, "*Do you know where X is?*". The same research assistant that took notes in the NI

experiment was seated nearby listening to the conversation but she avoided both eve contact and verbal interaction with participants. Using the same form as in the NI experiment (see Appendix 1), she recorded the statements of the RP participants. Despite the fact that the RP participants knew a study was being conducted and had agreed to participate, the decision was made not to audio- or video-record their comments in order to obtain the same type of data previously collected from the NI group through note-taking and recall (Beebe 1994; Félix-Brasdefer 2007). Though some clearly showed recognition that the second research assistant was taking notes, most RP participants ignored her presence. Following each role-play encounter, the researcher ended the interaction with "That's it, help yourself to a card" and sent the participant back to the first research assistant who invited them to draw a gift card from a basket. Most participants then either returned to their cars and drove away or took their gift card into the store to determine its value (card values were not noted on the cards themselves) and/or redeem it with a purchase. As in the NI experiment, once the participant left the table, the researcher and her assistant compared their memories of the speech event with the written notes and reconciled any discrepancies.

Once an interaction had been initiated with a participant from either the NI or the RP groups, the researcher's role was minimal and she commented very little during the direction-giving exchanges. Given that only the direction-givers' statements were analyzed in this study, the researcher avoided unnecessary influence on the exchanges. If participants asked her questions to confirm where they thought X was located or to check her knowledge of nearby landmarks, she responded as briefly as possible, providing supportive back-channeling such as "Okay" and "Uh huh". In order to preserve the naturalness of the interactions and respect the important influence a listener's behavior (Baker et al. 2008) can have on the direction-giving exchange, the researcher also responded to direction-givers' physical gestures by appropriately following their body posture, hand signals or gaze. Once the direction-givers finished the directions, the researcher communicated understanding with phrases such as "Okay, thanks" and "Got it", thanked the participants for their directions and then either drove away (NI group) or directed the participants to draw a gift card (RP group).

The research assistant/note-taker did not try to capture every word spoken by participants in either Group experiment, an impossible task, but because she did not have to interact with the participants and only observed the encounters, she was free to complete the form and take additional notes without distractions. She was ignored by all the NI participants and many of the RP participants. As in the NI experiment, she kept track of the RP participants' comments regarding the following categories: (1) yes/no responses to the two questions posed by the researcher; (2) participants' initial comments; (3) their general use of particular commands or modals (*turn, go, should, will*, etc.); (4) mileage and time estimates; (5) landmark references; (6) stoplight counting; (7) mention of a local bypass; (8) cardinal indicators; (9) road-naming; (10) if/how the participant identified that the direction-follower would know that she had arrived at X; and (10) any other comments deemed to be atypical by the researchers (see Appendix 1).

#### 4.2. Data analysis procedures

As in Ewald (2010), Wunderlich and Reinelt's (1982) interactional scheme again served as a useful point of departure for this analysis. The task of analyzing the field note data for the present study first involved separating the responses of males and females in both the NI group and the RP group to explore the possibility of sex-related differences in their directions. The analysis then required combining the responses of males and females in their respective Groups to explore the possibility of differences due to the contexts in which data were collected, i.e., natural encounters versus role-plays. The content of the participants' directions was then coded according to the inclusion of verbal devices (cardinal indicators, landmarks, mileage estimates, etc.) and the frequency of use. These verbal devices were then analyzed within Wunderlich and Reinelt's (1982) four-phase interactional scheme (initiation, route-description, securing and closure) to identify the phase(s) in which they were employed. Finally, the accuracy of each driving direction encounter was determined and recorded. Statistically significant differences were identified in the data through the use of SPSS V 16.0 (SPSS, Inc., Chicago, IL).

These data were then used to compare qualitatively and quantitatively the directions offered by (1) male and female participants and (2) NI and RP participants, respectively. Similarities and differences were explored in the driving directions offered by male/female participants and by participants who were participating in what they thought to be an authentic request for driving directions (the NI group) and participants who were told they were taking part in a study on driving directions (the RP group).

#### 5. Findings

In general, the participants in both experiments were willing to provide driving directions. Ultimately, 56 of the 60 NI participants (natural encounters), and 45 of the 60 RP participants (role-plays) provided directions.

#### 5.1. Sex-related differences

As noted (Ewald 2010), the NI experiment revealed only one statistically significant difference between male/female direction-givers who participated in the natural encounters with the researcher (see Table 1). That is, significantly more male direction-givers offered verbal mileage estimates than did the females ( $x^2$ =8.70; p<.05). In other regards, the directions provided by NI male and NI female direction-givers were similar in their use of directional indicators, landmarks, stoplight and time estimations, inclusion of road names and highway numbers as well as in their overall accuracy (though not statistically significant, the NI male participants' estimates more often contained errors, although both the male and female participants provided directions that contained errors of various types).

Findings based on male/female participants' directions in the RP experiment varied from those of the NI experiment in one important area. That is, the statistically significant finding ( $x^2$ =8.70; p<.05) in the NI group (that more NI male than NI female direction-givers included mileage estimates) did not hold true for the RP data ( $x^2$ =1.64; p=.685). Though significantly more NI males (18) included mileage estimates than did NI females (8), there was little difference between the number of RP males (5) and RP females (7) who included mileage estimates. Thus, the statistically significant sexrelated distinction found in the natural data (the NI group) is noticeably absent in the role-play data (the RP group). (The finding that more of the NI participants overall

included mileage estimates when compared to those of the RP participants is a finding explored in the next section.)

	Or oups m	Groups match emate Ose of mineage Estimates					
	Males (M) (48)		Females (M	l) <b>(53</b> )			
	Y <u>es</u>	No	Yes	No			
NI Group (27 M/29 F)	18 (67%)	9 (33%)	8 (28%)	21 (72%)			
RP Group (21 M/24 F)	5 (24%)	16 (76%)	7 (29%)	17 (71%)			

Table 1: NI/RP Groups Male/Female Use of Mileage Estimates

Moreover, the difference between male and female participants' inclusion of errors in their mileage estimates was also minimized in the role-play data (see Table 2). In the NI experiment, 14 of the 18 (78%) mileage estimates included by NI males were inaccurate or unclear while 4 of the 8 mileage (50%) estimates provided by NI females were inaccurate, a mathematical difference of 28% ( $x^2=2.01$ ; p=.157). For the RP group, 2 of the 5 (40%) mileage estimates included by RP males were inaccurate while 2 of the 7 (29%) mileage estimates provided by RP females were inaccurate, a mathematical difference of only 11% ( $x^2$ =.171; p=.679). Thus, though their difference in errors was not statistically significant, it seems that differences found in the natural context were neutralized by the role-play context.

#### Table 2: NI/RP Groups Male/Female Number of Mileage Estimates Containing Errors or Uncertainties

	Male	<u>Female</u>	Difference
NI Group	14/18 (78%)	4/8 (50%)	28%
RP Group	2/5 (40%)	2/7 (29%)	11%

Moreover, RP male and female participants' use of other verbal devices (directional indicators, landmarks, stoplight and time estimations, inclusion of road names and highway numbers) were similar to those of NI male and female participants, respectively. Thus, as in Ewald (2010), sex-related differences in these particular areas were minimal or non-existent in these RP data. Nevertheless, the RP experiment did not reveal the significant difference found in the NI experiment regarding the higher number of male than female direction-givers who included mileage estimates; furthermore, the directions offered in both contexts contained no other significant sexrelated difference.

In order to compare the overall data gathered in the two data collection contexts (i.e., natural versus role-play), the present analysis also combined and compared the responses of the male and female direction-givers in each respective Group; considerable differences were found in the data gathered in the natural (NI) versus the role-play (RP) context. Wunderlich and Reinelt's (1932) interactional scheme is a useful tool for analyzing those differences.

#### 5.2. Natural versus role-play data differences

As previously mentioned, the NI experiment confirmed that direction-giving, like many other speech acts, is a conventionalized linguistic event, characterized by the four phases of the interactional scheme (initiation, route-description, securing and closure) identified by Wunderlich and Reinelt (1982). As will be seen, RP participants' linguistic and cognitive behaviors during phases of the interactional scheme, along with their failure to recognize the particular speech event, suggest that they were much more

aware of their role as research participants than as direction-givers. This was particularly evident in the first and last phases (initiation and closure) when RP participants made statements that were not found in other studies that carefully documented typical direction-givers' utterances characterizing these two phases; thus, these two phases will be addressed separately. Then, particular elements of the routedescription and securing phases will be analyzed in the succeeding sections on cognitive task behaviors, verbal devices, directional indicators, landmarks, the use of estimates and overall accuracy.

#### 5.2.1. Initiation phase

First of all, 44 of the 60 RP participants responded affirmatively to the directionreceiver's (R's) first question ("Excuse me, are you from around here?"), an attentiongetting question that marked the beginning of the initiation phase with the NI participants. However, unlike the NI participants, none of the RP participants' responses revealed that they interpreted this question as a pre-request for directions. That is, instead of responding with statements related to direction-giving such as "Hardly, but maybe I can help you."; and, "Well, sort of. What are you looking for?" (as did the NI participants), several of the RP participants made statements unlikely to be found in natural direction-getting exchanges such as "No, not originally, but now, yes."; "Yes, for the last 10 years."; and, "No, I just helped my friend move."; conversely, no statements similar to these were made by any NI participants. Regardless of having just been informed that this was a research study on driving directions and asked to have a conversation in which they should interact as they normally would in that context, the RP participants responded extremely helpfully but with comments uncharacteristic of a natural direction-giving exchange. Their statements indicated that they interpreted R's question as eliciting background information, perhaps collected for research purposes, but none recognized it as a request for directions.

In response to the second question "Do you know where X is?", 46 of the RP participants answered affirmatively and 14 answered negatively. Unlike the NI participants who, in response to this same question, had apologized for not knowing where X was, not one of the 14 RP participants expressed any regret after his/her negative response. Also, in contrast to the NI participants who all immediately provided directions after affirmatively responding to R's indirect request, only 4 the 46 RP participants provided a route-description immediately after their affirmative responses. The other 42 RP participants simply looked at R and waited for R to continue the interaction, though a few did make additional personal or descriptive comments unrelated to direction-giving such as "Actually a friend of mine works there." and "My parents got married there.". What quickly became an awkward silence on the part of most of the RP participants the opportunity to respond and realizing that they did not intend to continue with a route-description, R made a subsequent, more direct request for directions, "Can you tell me how to get there?".

Thus, unlike the 46/46 NI participants who recognized at least one of R's initial questions as an indirect request for directions, no RP participants interpreted R's first question as initiating a directions-request speech event and only 4/46 interpreted R's second question as an indirect request for directions. The difference between the NI and the RP groups in this regard was statistically significant ( $x^2$ =77.28; p < .001). Even

though this encounter had been described to them as "*a study on driving directions*" as well as a "*hypothetical conversation*", that explanation, along with the first two contextualized questions, were not enough to trigger their recognition of the indirect speech act in the role-play setting. In sum, all the NI participants interpreted one or both of the two questions as a request for driving directions without any explanation or additional questions whereas most of the RP participants did not.

In fact, even after R asked "Can you tell me how to get there?", many RP participants made comments that indicated that they still had not recognized or entered the hypothetical speech event. For instance, five of them followed up with, "From here?", a question that was never asked by any NI participants in the initiation phase. One RP participant even confirmed, "Could I?"; another asked, "How to get there? To X?"; confused, one inquired about the task itself, "I have to tell you how to get there?"; similarly, another asked for confirmation, "You want me to give you directions?"; one was concerned that cardinal indicators might be required in the role-play and asked, "Do I have to do 'north' and 'south'?"; and finally, one proudly stated, "I would go a back way", subsequently providing a route that no other respondent in either Group offered; then, he closed his directions with this somewhat odd statement: "You can't miss it. There's only one turn. A woman would like this!" No statements similar to these were made by any NI participants.

#### 5.2.2. Closure phase

The closure phase also provided evidence that RP participants were highly focused on the study itself and the task of being "good research participants" rather than that of providing good driving directions. Following their route-descriptions and R's understanding and acceptance of those descriptions expressed through phrases such as "Okay, thanks" and "Got it", RP participants made statements that communicated their desire to inform the researcher of other information that might shed light on their previous comments. For example, one offered, "Now, I live in Phillipsburg, New Jersey. Does that make a difference?". Clearly, this question would be unlikely in an authentic interaction between a direction-giver and a real driver searching for destination X; it more likely points to this participant's awareness that she was participating in a study. Some participants asked questions like, "Did I get it right? So, I passed?"; "Did I tell you the right directions?"; "How was that? Okay?"; and "Did I pass? That was fun!". Moreover, having selected a gift card, several RP participants reflected on how easy they thought their role had been and commented, "That's it?!" and "Did I get a good score? Is that it? There's got to be a catch!"; they were clearly focused on their performance rather than on direction-giving itself and were aware that the researchers were observing them rather than genuinely interacting with them. Another participant who had actually offered relatively detailed directions observed sarcastically but accurately, "I could have just said 'Court Street'!", a comment revealing that he recognized the lack of real-world consequences in the speech encounter. That is, he knew that R was not going to follow his directions and drive to the destination.

Ironically, several similar comments related to participants' awareness of being research participants were also made by RP direction-givers whose routes contained significant errors and by RP participants who did not provide directions at all. For instance, after inquiring about his "score", that participant entered the convenience store and then returned outside to the research table and stated, "Now that I think about it, I sent you to the wrong place!". Another participant who had previously reported that he

did not know the location of X returned later to the table and commented that after thinking about it, he did indeed know where it was and attributed his inability to provide directions to his not knowing what the place was called. Similarly, one of the 46 who initially reported that he did indeed know where X was, politely refused to offer directions to X when prompted by the follow-up question, "Can you tell me how to get there?". He later returned to the table and stated, "It's on Hamp Road, isn't it? I had to think about it!". These comments suggest that perhaps the participants were so focused on accuracy due to their awareness of participating in a research study that they preferred to answer questions negatively or refuse to give directions rather than potentially jeopardize the study results or risk being asked additional questions that might reveal gaps in their familiarity with destination X. Or, some may have felt like they did not deserve the gift card they had received in exchange for their participation in the study since they had interacted with the researcher only briefly and, due to some sense of moral obligation, returned to explain their lack of participation or acknowledge their inaccurate directions. Whatever the case may be, their unsolicited comments highlighted their heightened awareness of being research participants rather than direction-givers carrying out an authentic, direction-giving task.

Another peculiarity found in the role-play interactions included the participants' reactions to the research assistant's presence and note-taking. Since she had no verbal interaction with the participants nor did she make eye contact with them while they completed the experiment, for the most part, they ignored her presence and the fact that she was writing unobtrusively on a legal pad. But, some RP participants wondered about her role and their comments ranged from curiosity to insecurity. For example, while interacting with R, one participant motioned toward the assistant and asked, "Is she writing all this down?"; and, after providing directions, another jokingly pleaded with the assistant, "Throw that away. That was probably all wrong.". These comments again point to the participants' awareness that they were not acting in an authentic direction-giving context. In the case of the NI group, no participant made any remark about the note-taker probably because she made no eye contact with them, held a cell phone to her ear and was able to appear completely separated from the exchange. Nevertheless, even if they had noticed her, they might not have thought it entirely odd that she was jotting down directions.

#### 5.2.3. Cognitive task behaviors

Wunderlich and Reinelt (1982) claimed that much of the cognitive task involved in direction-giving takes place in the initiation phase. The NI participants' behaviors (including pauses, self-speech and clarification questions) during the initiation phase partially confirmed this claim; subsequent phases of the interaction also provided additional evidence of the cognitive nature of the task being performed (Ewald 2010). The situation with the RP participants, however, was different in several ways.

Several of the RP participants' utterances during the initiation phase of the direction-giving role-play revealed cognitive processes similar to those of the NI participants. For instance, there were many pauses while the RP participants physically turned around and began to map out a route in their own minds. Simultaneously, they explained these pauses with statements such as "I had to think a little bit." as well as asked confirmation questions like "To X?"; "You want me to give you directions? One second, I would..."; and "Isn't it like down 414?". Some talked or whispered to

themselves and others even interrupted themselves, "What's that road? [to self]"; "What would be the fastest way to get there? [to self]"; and "I would go down 211 to 414. No wait [interrupting self]. 211 to 414 through the intersection.". These comments were similar to those offered by the NI participants.

What distinguishes the RP participants' exchanges from the more natural interactions with the NI direction-givers is the surfacing of linguistic evidence of the cognitive task being carried out. That is, though the NI participants continued to locate cognitively the requested destination and reevaluate the information they tried to communicate to R throughout the phases of the interaction (not only during the initiation phase), the RP participants' directions were much more succinct and linguistic evidence of cognitive tasks involved in their direction-giving were limited to the initiation phase. In fact, it is only during the initiation phase (as seen in Wunderlich and Reinelt 1982) that the RP participants made statements that indicated this kind of cognitive processing. In contrast to that of the NI participants, the speech of the RP participants throughout the ongoing phases lacked linguistic evidence of cognitive behaviors such as pausing, self-speech and clarification questions. As will be seen, the RP participants offered much less detailed directions than the NI participants who paused and evaluated their recommended routes and landmark identifications both throughout their route-descriptions and during the securing phase, a final phase in which direction-givers repeat key elements of the route-description and offer additional related details to ensure that R understands.

However similar or different the cognitive task of spatially locating destination X might have been for both Groups, the pragmatic task was different for the RP participants who were well aware that R was not intending to drive to X. One participant in the RP group even wondered out loud if R was conducting marketing research for destination X! Their comments lacked expression of any felt need to help R navigate, a responsibility clearly accepted by the NI participants. Moreover, the RP participants' directions lacked the frequent verbal devices evident in the NI data, a finding to which we will now turn.

#### 5.2.4. Verbal devices

The high degree of conventionalization in the driving directions exchange established by previous research (Ewald 2010) was not found in the role-play data. In fact, relatively few securing phase elements (e.g., summaries, repetitions, etc.) were present. Comprehension checks on the part of the RP direction-givers were non-existent. Not even one RP participant offered any statement during closure that was similar to those of the NI group who responded to R's "*Okay, thanks*" and "*Got it.*" with parting words of encouragement for the wayfinding task and advice on what to do if the directions proved to be difficult to follow (e.g., "*Ask someone when you get down there.*" or "*Sorry. It's not that great of directions but it should be pretty easy to find.*", as stated by the NI participants).

It could be argued that R did not adequately present or carry out her role as an interlocutor in the role-play and that her minimal responses discouraged RP participants from commenting further or with a high degree of detail. However, it is worth noting that R was similarly quiet during the interactions with both the NI and the RP participants and the NI participants' directions did include much specific information as well as many verbal devices. The following section highlights several similarities and differences in each Group's use of verbal devices.

#### 5.2.5. Directional indicators (cardinal and relative)

Participants' use of relative (*left/right*) and cardinal indicators (*north/south*) did not reveal any significant differences between the role-play data and the more natural interactions (see Table 3). Neither context seemed to promote or prevent direction-givers' use of relative indicators nor did either context significantly affect their combined use of both relative and cardinal indicators ( $x^2$ =.472; p=.925). Both Groups preferred relative over cardinal indicators (73.2% to 1.8%, and 77.8% to 2.2%, respectively), and both Groups used the two types of indicators in tandem with relatively limited frequency (23.2% and 17.8%); rarely did either Group include solely cardinal indicators (1.8% and 2.2%) or fail to include an indicator of one of the two types (1.8% and 2.2%) in their route-descriptions.

#### Table 3: NI/ RP Groups' Use of Relative/Cardinal Indicators

	NI Group (56)	RP Group (45)
Relative (only)	41 (73.2%)	35 (77.8%)
Cardinal (only)	1 (1.8%)	1 ( 2.2%)
Both Relative and Cardinal	13 (23.2%)	8 (17.8%)
Neither Relative nor Cardin	nal 1 (1.8%)	1 ( 2.2%)

#### 5.2.6. Use of landmarks

A significant statistical difference was found in participants' use of landmarks in their route-descriptions (see Table 4). Specifically, the NI participants were much more likely to include landmarks (e.g., gas stations, Dunkin' Donuts, car dealerships or Kmart) than were the RP participants ( $x^2$ =10.21; p < .001).

#### Table 4: NI/RP Groups' Use of Landmarks

	NI Group (56)		<b>RP</b> Grou	p (45)
	Yes	No	Yes	No
Landmarks	27 (48.2%)	29 (51.8%)	8 (17.8%)	37 (82.2%)

#### 5.2.7. Mileage and time estimates

Another statistically significant difference ( $x^2$ =4.15; p=.042) was found in participants' frequent inclusion of mileage estimates (see Table 5). The RP participants were much less likely to include mileage estimates than were the NI participants (26.7% versus 46.4%). Little difference was found in their inclusion of time estimates, infrequent in the NI group and nonexistent in the RP group ( $x^2$ =1.64; p=.200).

	NI Group (56)		RP Group (45)	
	Yes	No	Yes	No
Mileage Estimates	26 (46.4%)	30 (53.6%)	12 (26.7%)	33 (73.3%)
	Yes	No	Yes	No
Time Estimates	2 (3.6%)	54 (96.4%)	0 (0%)	45 (100%)

#### Table 5: NI/RP Groups' Use of Mileage/Time Estimates

#### 5.2.8. Stoplight estimates and use of road names/highway numbers

Another statistically significant difference between the Groups was found in their inclusion of stoplight estimates (see Table 6). The RP participants were much less likely to include such references than were the NI participants ( $x^2$ =4.44; p=.035). However, both Groups' use of road names and highway numbers was similar ( $x^2$ =.57; p=.753) (see Table 7).

#### Table 6: NI/RP Groups' Use of Stoplight Estimates

	NI Group (56)		<b>RP</b> Group	(45)
	Yes	No	Yes	No
Stoplight Estimates	25 (44.6%)	31 (55.4%)	11 (24.4%)	34 (75.6%)

#### Table 7: NI/RP Groups' Use of Road Names/Highway #'s

	NI Group (56)	RP Group (45)
Road Names (only)	0 (0%)	0 (0%)
Highway #s (only)	36 (64.3%)	27 (60.0%)
Used Both	18 (32.1%)	15 (33.3%)
Used Neither	2 (3.6%)	3 (6.7%)

#### 5.2.9. Accuracy

As was mostly the case within the NI group, the few sex-related differences found within the RP participants' driving directions were statistically insignificant (i.e., their use of landmarks, inclusion of stoplight estimations, etc.). But, in terms of their accuracy, it is worth noting the similarities in their errors. That is, of the total number of errors committed (43) in the NI group, 21 were committed by males and 22 by females and of the total number of errors committed (12) in the RP group, 7 were committed by males and 5 by females, a finding that again contrasts with that of previous research (e.g., Ward, et al., 1986, among others) reporting significantly more errors on the part of female direction-givers (see Table 8). Nevertheless, these findings were not statistically significant (NI Group:  $x^2$ =.029, p=.865; RP Group:  $x^2$ =.895, p=.344).

However, a significant statistical difference was found when comparing the driving direction errors of the NI participants with those of the RP group. The RP direction-givers committed significantly fewer errors than did their counterparts in the NI group ( $x^2$ =25.27; p<.001). Almost 77% of the NI participants included an error in

their driving directions compared with almost 27% of the RP participants. No statistical analysis on the types of errors (mileage, stoplight, etc.) was performed due to the relatively low frequency of errors (12) belonging to the RP participants.

#### Table 8: NI/RP Groups' Inclusion of Errors

	NI Group (56)			RP Group (45)		
	Male (27)	Female (29)	Total	Male (21)	Female (24)	Total
Errors	21 (77.8%)	22 (75.9%)	43 (76.8%)	7 (33.3%)	5 (20.8%)	12 (26.7%)
No Errors	6 (22.2%)	7 (24.1%)	13 (23.2%)	14 (66.7%)	19(79.2%)	33 (73.3%)

#### 6. Discussion

This section will be organized around the three research questions that motivated this study.

# **6.1.** Do interlocutors situated in a gas station interpret an indirect request for directions as such in a driving-direction role-play?

This study found that NI direction-givers, when acting in an authentic context that carries real-world consequences, did recognize an indirect request for directions, a finding that confirms Grice's (1975) and Psathas and Kozloff's (1976) previous work. But, compared to participants in the NI group, the RP participants' failure to interpret R's "*Do you know where X is?*" as an indirect request for driving directions was statistically significant. The role-play context likely negatively influenced their ability to recognize this indirect speech act, an issue that will be addressed in detail in the following section. RP participants' lack of ability to recognize this indirect request for direction-giving behaviors would also be different throughout the entire direction-giving interaction.

As was found in Ewald (2010), Wunderlich and Reinelt's (1982) interactional scheme proved a helpful construct in analyzing driving directions. After closely exploring its phases, especially initiation and closure, this study revealed that the conventionalization evident in direction-giving in a natural context was lacking in the role-plays, another reason to emphasize the importance of natural data in research on speech acts.

The lack of conventionalization in the role-plays was also seen in the overall decrease in the use of verbal devices on the part of RP direction-givers. The comparatively few verbal devices (landmarks, mileage estimates and stoplight estimates) included by the RP participants in their route-descriptions strongly point to their awareness that R was not going to follow their driving directions and that, therefore, few details were needed. The absence of real-world consequences (the possibility that R would follow the directions and could get lost) and an authentic direction-giving context (a conversation between two gas station acquaintances rather than a researcher and a study participant) likely account for the limited detail included in the RP participants' route-descriptions. Moreover, their omission of securing phase

elements, their multiple comments during closure regarding their performance on the task and the recognition on the part of some of them of the presence of a note-taker suggest that the RP participants were generally more aware of their authentic role as research participants rather than as direction-givers, thus resulting in less than typical linguistic behaviors in the direction-giving exchange, another point that will be taken up in the following section.

The similarities among the NI and RP participants' use of directional indicators, road names/highway numbers and time estimates strongly suggest that, though the task of direction-giving was viewed very differently in the two contexts, the role-play participants displayed some linguistic behaviors similar to those of the NI participants while they completed the cognitive task involved in formulating a route-description. However, this analysis found evidence that though the cognitive task continued throughout the interaction for the NI participants, it was limited to the initiation phase for the role-play participants, a finding that is somewhat expected considering, again, the lack of real-world consequences hinging on the accuracy of the directions provided.

At first blush, one could be tempted to think that the significantly higher frequency of errors from the NI participants (the more natural data) was due to their lack of personal investment in the speech encounter. That is, it could be argued that as gas station "acquaintances", the NI direction-givers probably thought they would never again meet up with R and therefore were sloppy in their mileage or stoplight estimations. However, though anecdotal, the NI participants' sincere expressions of support during closure and the high degree of detail and repetition included in their route-descriptions point to a different conclusion. Their actions confirmed their awareness of real-world consequences. They genuinely seemed to want to help R find her way and provided as much information as possible to that end; specifically, the NI participants' directions contained significantly more landmarks, stoplight and mileage estimates. But, this higher degree of information carried with it a relatively higher number of errors in their directions. In contrast, the significantly fewer details in the RP participants' route-descriptions could account for their significantly lower frequency of errors. That is, it is likely that because they offered less information, they made fewer errors.

# **6.2.** Does the fact that the direction-givers know that they are participating in a study significantly change the nature of the exchanges?

The NI direction-givers participated in what they believed to be a natural speech encounter with a researcher who asked (indirectly) for directions to destination X. Cohen (1996) claimed that when "the interlocutor involved is not aware that the event has been contrived for the purposes of collecting data or is aware and agrees to cooperate (e.g., the actual owner of a store hearing a complaint about merchandise from a subject in a study), the situation would be called real-play" (24), rather than "role-play".

Though the NI direction-givers were not aware that the exchange was "contrived for the purposes of collecting data", the term "real-play" does not completely represent the exchanges in the NI experiment. The encounters between NI participants and the researcher were not "naturally-occurring" speech acts in the sense that the directionreceiver already knew how to get to destination X; she asked for directions with no intention of following them but rather for the purpose of collecting data. That is, these encounters were not captured during spontaneously-occurring conversations among gas station customers, a truly natural data-collection situation that, though ideal, would unlikely be captured in research both for logistic and ethical reasons. Nevertheless, the NI participants' "real" encounters with the researcher were much more like "naturallyoccurring" speech than were those of the RP group. Thus, though "real" in the term "real-play" accurately captures the authentic nature of the NI participants' conversational behaviors, the term "play" is misleading. From the perspective of the NI participants, nothing in this interaction was playful or purposeless because they viewed the interaction as having "real-world consequences" (Félix-Brasdefer 2007: 181). Evidence of this is found in the fact that they never asked why the researcher posed the two questions ("*Excuse me, are you from around here?*" and "Do you know where X *is?*") nor did they react in any way that suggested that they believed the conversation to be unnatural or lacking authenticity. Moreover, their speech followed consistent interactional patterns and provided detailed direction-related information (Ewald 2010).

In contrast, the RP participants offered driving directions that at times were incomplete and extremely brief, characterized by statistically significant decreases in the number of stoplight estimates, mileage estimates and landmarks offered. This lack of information provided to R also resulted in a significantly lower number of errors in the directions offered. Not recognizing any real-world consequences, at times they even asked what the purpose was of what they were doing. As previously noted, they posed questions and made statements unlike any made by the NI participants. Even though they were "real" gas station customers rather than study participants seated in a laboratory who were asked to pretend that they were gas station customers, their interactions as direction-givers were far from "natural".

The RP participants' interactional patterns did not follow those found in the previous studies that demonstrated a high degree of conventionalization in direction-giving in naturally-occurring data (Wunderlich and Reinelt 1982; Pearson and Lee 1992). Rather, their interactional patterns pointed to their high level of awareness that they were participating in a relatively unnatural speech event designed for the purposes of research and, at times, their behavior and language as direction-givers were unnatural, a finding confirmed in Jung (2004) and recognized by Demeter (2007). Indeed, the participants' pragmatic awareness triggered by the role play setting was that of research study participants, rather than direction-givers. In short, the RP participants' interactions with the researcher varied considerably from those of the NI group in many important respects.

Given what is known about the high degree of conventionalization and routinization associated with direction-giving, the peculiarity of some of their responses suggests that the RP participants were interacting with R as a researcher, not as an interlocutor initiating an everyday speech event. As to be expected, Grice's (1975) Cooperation Principle and conversational maxims did apply to these encounters but not in the same way as they did in the natural interactions with the NI participants. That is, many RP participants interpreted what R asked according to the maxims of quantity, quality, relation, and manner but, not recognizing an authentic direction-giving context or anticipating any real-world consequences, their application of these maxims hinged on their awareness of being participants in a research study rather than direction-givers involved in a genuine interaction and, in turn, their responses were motivated less by direction-giving concerns and more by expectations associated with being helpful research participants.

## **6.3.** How do these role-play findings compare to those based on the natural setting in terms of sex-related differences?

In neither the natural nor the role-play context did the analysis of the route-descriptions offered by male and female direction-givers point to major or numerous sex-related differences. In fact, the only significant difference found between the directions provided by males and females was that more male than female participants included mileage estimates in the natural context. Methodologically, at least in this particular study, this finding suggests that while role-plays may provide researchers with information regarding a particular speech act, important distinctions (e.g., sex-related differences) may be hidden or lost.

In addition, when the responses of males and females were combined within their respective Groups, role-play direction-givers exhibited several significantly different linguistic behaviors in terms of their use of verbal devices and their interactions with R throughout the initiation and closure phases. Thus, as previouslyclaimed (Félix-Brasdefer 2007), the role-play context can only simulate real-life; it cannot duplicate it. As a result, future investigations should take this limitation into consideration when making generalizations about naturally-occurring speech events and typical linguistic behaviors based on role-play data alone.

#### 7. Limitations and future research

As in all investigations, the present study has several limitations. Perhaps the most obvious is the size of the population from whom directions were elicited. Of course, findings based on statistical data are considered to be more reliable as the sample increases in size. Given that understanding, care should be taken when generalizing these findings and more investigations should be conducted that include a greater number of both NI and RP participants. Additionally, readers are encouraged to evaluate the validity of present findings keeping in mind that they are based on this particular context and these particular participants. Certainly a similar study carried out in a different location with different participants, both NI and RP, could yield different results.

Also, any investigation that allows research participants to know that they are participating in a study is subject to certain vulnerabilities. That is, it is well-known that participants will deliberately act in ways that are atypical simply because they are being observed. The presence of the observer also affects the naturalness of the participants' responses and, therefore, the validity of the data. In that sense, the data gathered from the RP group of the present investigation may be compromised.

The findings of this study are based on interactions with participants from whom the researchers did not obtain personal information. It is theoretically possible that one or more participants were under 18 or were non-native speakers of English since both of these variables cannot be consistently judged with complete accuracy. Moreover, the findings of this study are based on interactions with participants of unknown social classes, geographical origins, personality types, etc. All of these factors are known to play a role in conversational style. These variables were not controlled in this study and therefore nothing is known about their possible influence on the data. Future direction-giving research should explore these issues.

Additionally, it is almost certain that the NI and RP experiments did not include any of the same participants. Thus, some of the differences found between the two Groups'

direction-giving exchanges could be due to individual differences in the participants' own conversational styles rather than to the role-play/natural settings. Moreover, the present findings are based on the researcher's perspectives without any input from the participants themselves. Future studies could incorporate participants' perspectives on the issues under investigation. Their input might shed light on why they responded (or did not respond) in particular ways, what effect they believe the role-play context had on their interactions, or how they think the presence of the note-taker might have influenced their understanding of the encounter, among other issues.

Another important detail that could have affected the findings of this particular investigation is that the role-play experience of the RP participants was not identical to that of the NI participants in three key ways. First, the NI participants' understanding of the two initial questions, *"Excuse me, are you from around here?"* and *"Do you know where X is?"*, benefited from physical clues such as a driver approaching in a vehicle, an interruption in their everyday activities that they had likely experienced before, and possibly even the gas station location itself. The physical elements at play in the RP group, the research table, the poster announcing what was happening, the offer of a gift card, and the presence of researchers, all probably served as distractors from the authentic linguistic context and created some degree of uncertainty and even suspicion about the direction-giving exchange for the RP participants. These physical factors likely prevented them from interpreting the two initial questions in the same way and added to the significant differences found between the natural and the role-play data.

Coupled with that, the RP participants did not benefit from interacting in a relatively familiar context (while pumping gas, for example). Instead, they were explicitly made aware from the beginning of the interaction that this was a research study and, therefore, their pragmatic recognition and understanding of the direction-giving context was likely disturbed by their having been pulled out of interactions in their "real world" and into interactions with a researcher in a hypothetical context. Additionally, the researcher deliberately tried to provide enough back-channeling to encourage the listener and contribute to as "normal" a direction-giving exchange as possible while she simultaneously tried to avoid behaviors that might overly distract the direction-giver or highlight the artificiality of the interaction. This, too, likely affected the typicality of their linguistic behaviors.

Moreover, the RP participants did not respond to the exact same question as did NI participants. Instead of the first question, "Excuse me, are you from around here?", the RP participants were first told that this was a research study on driving directions in which they would have a "pretend" or "hypothetical" conversation with the researcher and then they were asked to answer as they normally would. The term "role-play" was deliberately never used with them. The researcher began the role-play interaction with the question, "Are you from around here?". It is possible that the omitted "Excuse me" portion of the question might have activated participants' pragmatic awareness of the direction-giving encounter, or at least it might have helped them adopt a role-play posture. The decision was made to exclude "Excuse me" from the interaction so as not to confuse the participants, make them immediately feel uncomfortable with the interaction or highlight the artificiality of the setting. Future studies might include the "Excuse me" element to determine if the use of such conventionalized attention-getting phrases helps participants respond more as direction-givers and less as research participants.

Finally, to take full advantage of role-plays as a data elicitation technique or to improve the quality of participants' reflections on their own experiences, future participants could be trained in speech act production, an idea debated by Cohen (1996). In light of the significant differences found between the natural and role-play data in the present investigation, this claim is initially appealing. But, given the unavoidable and inherent artificiality of the role-play context, it seems likely that "training" participants how to role-play might result in even more unnatural behaviors, linguistic and otherwise, and an even greater awareness on their part of interacting in a research context. Participants might then be exceedingly more concerned with performing and, as a result, produce utterances and behaviors even more unlike those they would normally produce in natural encounters. In short, both the findings and the limitations of this study highlight a number of important issues for future research on speech acts, direction-giving and the use of natural and role-play data.

#### **Appendix 1: Data Collection Form**

From around here? Knows where it is? Extra comments:	M Ye Ye		Female No No	If "no	)",		
Commands:							
want to		need	' to	goi	ing to		will
come through		shou	ld	ver	bs alone	2	
Б. 4'	V		λŢ				
Estimates mileage?	Yes		No				
Estimates times?	Yes		No				
<b>Refers to landmarks?</b>	Yes		No				
	Gas stat	ions	Bracker	rs Din	ner	Car d	ealer
	Dunkin'	Doni	uts K	mart			
<b>Counts stoplights?</b>	Yes		No				
<b>Mentions Bypass</b> ?	Yes		No				
Go/Turn: South	n	Strai	ight	West	Left		Right
Road references: 414		Ham	p Road	211	Eagan	Road	Main Street
How do you know you	a're ther	e?					
Extra:							

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#### References

Allen, Gary L. (2000) Principles and practices for communicating route knowledge. *Applied Cognitive Psychology* 14: 333-359.

Baker, Rachel E., Alistair J. Gill, and Justine Cassell (2008) Reactive redundancy and listener comprehension in direction-giving. Proceedings of SIGDIAL, June 19-20, Columbus, Ohio.

Beebe, Leslie (1994) Notebook data on power and the power of notebook data. Paper presented at the annual TESOL Conference, March, Baltimore, MD.

Beebe, Leslie, M. Cummings, and Martha Clark (1996) Natural speech act data versus written questionnaire data: How data collection method affects speech act performance. In S.M. Gass, N. Joyce (eds.), *Speech acts across cultures: Challenges to communication in a second language*. Berlin: Mouton de Gruyter, pp. 65-86.

Brown, Leonora N., Cindy J. Lahar, and James L. Mosley (1998) Age and gender-related differences in strategy use for route information: A "map-present" direction-giving paradigm. *Environment and Behavior* 30.2: 123-143.

Cohen, Andrew D. (1996) Investigating the production of speech act sets. In S.M. Gass, J. Neu (eds.), *Speech acts across cultures: Challenges to communication in a second language.* Berlin: Mouton de Gruyter, pp. 21-43.

Collett, Peter, and Gregory O'Shea (1976) Pointing the way to a fictional place: A study of direction giving in Iran and England. *European Journal of Social Psychology* 6.4: 447-458.

Couclelis, Helen (1996) Verbal directions for way-finding: Space, cognition, and language. In J. Portugali (ed.), *The Construction of Cognitive Maps*. Alphen a. Rijn: Kluwer Academic Publishers, pp. 133-153.

Coulmas, Florian (1981) Introduction: Conversational Routine. In F. Coulmas, (ed.), *Conversational Routine*. Berlin: Mouton Publishers, pp. 1-18.

Demeter, Gusztav (2007) Role-plays as a data collection method for research on apology speech acts. *Simulation and Gaming* 38.1: 83-90.

Ewald, Jennifer (2010) "Do you know where X is?": Direction-giving and male/female direction-givers. *Journal of Pragmatics* 42.9: 2549-2561.

Félix-Brasdefer, J. César (2003) Validity in data collection methods in pragmatics research. In P. Kempchinsky, and C.E. Piñeros (eds.), *Theory, Practice, and Acquisition. Papers from the 6th Hispanic Linguistics Symposium and the 5th Conference on the Acquisition of Spanish and Portuguese.* Somerville, MA: Cascadilla Press, pp. 239-257.

Félix-Brasdefer, J. César (2007) Natural speech vs. elicited data. Spanish in Context 4.2: 159-185.

Golding, Jonathan M., Arthur C. Graesser, and Jerry Hauselt (1996) The process of answering directiongiving questions when someone is lost on a university campus: The role of pragmatics. *Applied Cognitive Psychology* 10: 23-39.

Grice, H. Paul (1975) Logic and conversation. In P. Cole, and J. Morgan (eds.), *Syntax and Semantics, Speech Acts.* New York: Academic Press.

Harrell, W. Andrew, Jeffrey W. Bowlby, and Deana Hall-Hoffarth (2000) Direction wayfinders with maps: The effects of gender, age, route complexity, and familiarity with the environment. *The Journal of Social Psychology* 140.2: 169-178.

Harris, Lauren Julius (1981) Sex-related variations in spatial skill. In L. Liben, N. Newcombe, and A. Paterson (eds.), *Spatial Representation and Behavior Across the Life Span*. New York: Academic Press, pp. 83-125.

Hartford, Beverly S., and Kathleen Bardovi-Harlig (1992) Experimental and observational data in the study of interlanguage pragmatics. *Pragmatics and Language Learning* 3: 33-52.

Jung, Euen Hyuk (Sarah) (2004) Interlanguage pragmatics: Apology speech acts. In C.L. Moder, and A. Martinovic-Zic (eds.), *Discourse Across Languages and Cultures*. Amsterdam/Philadelphia: John Benjamins Publishing Company, pp. 99-116.

Kasper, Gabriele, and Merete Dahl (1991) Research methods in interlanguage pragmatics. *Studies in Second Language Acquisition* 13: 215-247.

Klein, Wolfgang (1982) Local deixis in route directions. In R.J. Jarvella, and W. Klein (eds.), Speech, Place, and Action. PLACE: John Wiley and Sons, pp. 161-181.

Lawton, Carol A. (2001) Gender and regional differences in spatial referents used in direction giving. *Sex Roles* 44.5-6: 321-337.

Mark, David M., and Michael D. Gould (1995) Wayfinding directions as discourse: Verbal directions in English and Spanish. In J.F. Duchan, G.A. Bruder, and L.E. Hewitt (eds.), *Deixis in Narrative*. New Jersey: Lawrence Erlbaum, pp. 387-405.

Miller, Leon K., and Viana Santoni (1986) Sex differences in spatial abilities: Strategic and experiential correlates. *Acta Psychologica* 62.3: 225-235.

Napoleon, Siena (2007) From here to there: A sociolinguistic study in gender and direction-giving. *Indiana Undergraduate Journal of Cognitive Science* 2: 18-27.

Pearson, Bethyl A., and K. Samuel Lee (1992) Discourse structure of direction giving: Effects of native/nonnative speaker status and gender. *TESOL Quarterly* 26.1: 113-127.

Psathas, George (1986) Some sequential structures in direction-giving. Human Studies 9: 231-246.

Psathas, George, and Martin Kozloff (1976) The structure of directions. Semiotica 17.2: 111-130.

Scotton, Carol M., and Janice Bernsten (1988) Natural conversations as a model for textbook dialogue. *Applied Linguistics* 9.4: 372-384.

Ward, Shawn L., Nora Newcombe, and Willis F. Overton (1986) Turn left at the church, or three miles north: a study of direction giving and sex differences. *Environment and Behavior* 18.2: 192-213.

Wunderlich, Dieter, and Rudolph Reinelt (1982) How to get there from here. In R.J. Jarvella, and W. Klein (eds.), *Speech, Place, and Action.* PLACE: John Wiley and Sons, pp. 183-201.

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