UNDERSTANDING DIFFERENCES IN CONVERSATIONAL MEMORY: A COMPARISON OF CLOSE FRIENDS AND STRANGERS

by

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(Under the Direction of Jennifer Samp, Ph.D)

ABSTRACT

This thesis seeks to examine the processes of conversational memory after interactions with strangers and close others. Several studies have considered conversational memory, but this thesis seeks to extend research into several new realms. In particular, the type of interaction (concordant or discordant) is considered, as well as the type of relationship (close friend or stranger). Participants in this study were one hundred and forty-four dyads. Respondents completed all procedures with a close friend and a stranger and were alternately assigned to conditions in which they either had a discordant interaction or concordant interaction for five minutes. After the conversation, participants were asked to recall as much information as they could about the conversation. Results indicated that strangers recall proportionately more of a conversation than close friends. There was not a significant difference between the amount of recall following a concordant conversation as compared to a discordant conversation.

INDEX WORDS: Conversational Memory, Close Friend Interactions, Stranger Interactions, Concordant Conversations, Discordant Conversations

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B.A., Meredith College, 2001

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

MASTER OF ARTS

ATHENS, GEORGIA

2003

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August 2003

## ACKNOWLEDGEMENTS

The author would like to thank the following people for their assistance and support during the course of this project:

Dr. Jennifer Samp for her patience and dedication to helping me complete this project and guiding me towards excellence in all aspects of my work.

Dr. Jennifer Monahan and Dr. Jerold Hale for their interest and support during the completion of this project.

The many research assistants who helped with a variety of aspects of the project: Melissa Daniel, Melanie Smith, Melia Handzel, Juanita Perry, Evita Kaigler and Mark Needle.

My family, for the time they dedicated to praying, supporting, and assisting with this project from the very beginning to the very end.

My wonderful husband Jonathon Humphreys, who spent countless hours helping with every aspect of the project, and supported me the entire time, keeping me focused on the positives so that I could accomplish this task.

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# CHAPTER 1

*Conversations And Memory: Why Do They Matter?*

Communication is an important tool because it allows us to decrease uncertainty of relational partners and interactions (Berger & Calabrese, 1975; Berger & Bradac, 1982). As uncertainty is decreased we become more open and willing to self-disclose, allowing understanding of self and others to continue to increase (Luft, 1970; Altman & Taylor, 1973). Because communication can be used to build and enhance relationships, it is the necessary tool for maintaining and improving the quality of such close pairings.

A major area of communication is the conversation. Not only are conversations important in building understanding with one another, but our memories of such interactions are important as well. Stafford, Waldron and Infield (1989) explain that "conversational memories forge the link between communication and such social-cognitive processes as attribution and person perception" because conversational memory stores not only content, but also impression-forming material such as "attributions, evaluations, elaborations, themes, and misperceptions" (p. 591). Because memory is both a social and cognitive phenomenon, "it is important to know how memory is represented in the brain; but it is also important to understand the functions and nature of recall in its social context" (Ross & Holmberg, 1990, p. 149). This thesis intends to address the third issue: the nature of recall in the social context. Specifically, I will consider the social context of close personal relationships, and how closeness may affect memory.

An understanding of the role of communication in close relationships allows for a framework from which to begin to look at how conversational memory specifically affects these close personal relationships. Edwards and Middleton (1988) explain relationships and memory as interdependent factors. Relationships affect what is remembered by signifying those things that are worth remembering, how memories are linked to one another, and providing a context for memory (Edwards & Middleton, 1988). As well, remembering determines the state of the relationship, and conversations about the past define, negotiate, redefine, and dispute the relationship (Edwards & Middleton, 1988).

Much of prior research on memory deals with memory for numbers, nonsense syllables, lists, or some sort of script. Therefore there are at least two areas that are lacking within this field: traditional research may not be relevant to conversational memory in general, and memory within the specific context of close relationships has been understudied. Because of the nature of conversations, it "may be inappropriate to immediately generalize theories and research from more traditional memory models to conversational memory" (Stafford & Daly, 1984, p. 398). One must be careful not to assume that all memory works the same. Conversations are a different sort of stimulus, and memory for them may be different from memory for other things. Conversations differ from previously studied items such as lists and numbers because conversations are complex, dynamic and include more than one person. According to Ross and Holmberg (1992) cognitive psychologists have spent very little time on event memory within close personal relationships. Most research on conversational memory has involved strangers (Stafford & Daly, 1984; Stafford, Burggraf, & Sharkey, 1987; Stafford, Waldron, &

Infield, 1989; Benoit, Benoit, & Wilkie, 1995). Although some have considered intimates (Sillars, Weisberg, Burggraf, Zietlow, 1990), most have focused more on past relational events rather than specific conversations, and no one has examined memory for particular types of conversations. This leaves much to be studied regarding the memory of individuals in close relationships. Conversational memory can either contribute positively to a relationship through the recall of shared experiences, or negatively through differing memories and recollections, which may lead to conflict. As such, this thesis will focus on conversational memory among close relational partners as compared to the conversational memory of strangers and seeks to enhance understanding in the realm of conversational recall.

*Accuracy/Inaccuracy of Memory*

Although conversational memory has an important effect on communication and relational interaction, it is not always accurate. Stafford and Daly (1984) observed that people's memory for conversations, even a very recent conversation, is quite limited. In their study participants recalled only 10% of their conversation when tested only five to ten minutes after the actual conversation (Stafford & Daly, 1984). As the time after a conversation increases, recall decreases further. Stafford, Burggraf and Sharkey (1987) reported that respondents accurately remembered only 4% of their conversations a month later. Memory may decrease with time for a number of reasons, including decay or fading away of the memory, interference of other more recent information, and retrieval failure (Reisberg, 2001). Researchers suggest that as time passes people may remember impressions of others rather than specific conversational events, and make their own

additions to conversations as they forget the specific details (Stafford, Burggraf, & Sharkey, 1987).

Previous research has also shown that people tend to recall more of their partner's statements in a conversation than their own (Stafford & Daly, 1984; Stafford, Burggraf, & Sharkey, 1987). This has interesting implications for arguments based on differing opinions regarding whether or not one partner mentioned something in conversation. If a person remembers his or her own contributions with less accuracy it is understandable that people will disagree on something as simple as whether or not something was said, as well as more complicated issues such as how and why something was said. The following dialogue is one example of such a problem:

> Rachel turned to Billy and glared. "I can't believe you told everyone at the party about the accident. I specifically told you not to tell anyone!"
> "You never said that!"
> "I did," said Rachel. "I remember it clearly. I was sitting right there, and you had just walked in. I told you all about the accident, and then I asked you not to tell anyone. You promised me you wouldn't tell."
> "I never promised anything," Billy retorted. "Maybe you asked me not to tell, I don't remember. But one thing is for sure – I did not make any promises. I would remember that if I had said it!"

So, what is the problem here? Is one person right and the other wrong? Is someone lying? Obviously two relational partners have had a conversation in the past, or at least one person thinks they had a conversation, but their memories for that interaction are very different. What causes people to remember conversations differently and why might some people remember better than others? I will attempt to provide a better understanding regarding these questions and others during the course of this study. What is important for now is simply to understand that differences in conversational memory may exist between partners. In the next chapter I will explicate the basic processes of

memory and discuss the implications of these processes for communication. In chapter three I present a model examining conversational influences on the accuracy of conversational memory. From this model several hypotheses are deduced. In Chapter Four I discuss a study to examine my perspective. Chapter Five will include an analysis and results section and Chapter Six will be a discussion of the research findings.

# CHAPTER 2

*Effects of Memory Processes on Communication and Conversations*

According to Forgas (1991), cognition is an "essential ingredient of every close relationship" (p. 151). Cognition is an overarching term that includes "thinking, reasoning, planning, decision-making and problem-solving" as well as "perception, memory, action and language" (Levy, 1987, p. 4). Cognitive mechanisms provide a framework by which to understand communication and relational behavior, including how thoughts and thought-processes affect interaction. Things that we attend to and think about will be organized in particular ways in our minds and memories. Sometimes we will be able to retrieve these experiences from memory, and sometimes we will not.

Since memory impacts relationships in a variety of ways, it is important to understand what memory is and how it works. The human brain is a highly organized tool. As information is received it is organized into specific knowledge structures, scripts, schemas and scenes. This organized information is then encoded into memory, meaning it is placed in particular nodes, or storage units, within the network of knowledge we possess. These nodes are arranged in memory in an organized fashion so that information may be retrieved at a later date. To retrieve information, related concepts or ideas must be brought to mind, activating the nodes containing the relevant information and bringing it forth from memory. In order to fully understand the workings of memory it is important to review cognitive mechanisms and processes. Memory is only one aspect of cognition.

Associated thoughts, memories or experiences may allow people to draw something from memory. The way in which people organize and store their thoughts will affect their ability and clarity of memory in the future. Cognition is vital to understanding interactions with others and necessary for continued relational growth. The entire process of communication involves different cognitive steps. According to Wyer and Gruenfeld (1995), these cognitive steps are semantic encoding (or interpreting pieces of the message), organization, storage, retrieval and generation of a response. Understanding the cognitive processes of a communication interaction allows for the determination of how information is received, understood, and used.

*Encoding*

Cognitive theorists assume a progression from information being encoded in nodes, which are connected in a network that results in the development of scripts and schemas. According to Spreading Activation Theory (Collins & Loftus, 1975), concepts are encoded into the brain into nodes, which are located in different parts of a network. Concepts that are closely related to one another, such as "bread" and "butter" will be located close together in the network (Baddeley, 1998). Information is processed when "two concepts are stimulated, [and] activation from each spreads throughout the network until the two concepts are linked" (Baddeley, 1998, p. 238). This network of thoughts, ideas and concepts leads us to develop scripts and schemas representing knowledge.

Scott, Fuhrman and Wyer (1991) explain Wyer and Srull's (1986, 1989) work with social memory and its two components, the work space and the permanent storage unit. The work space is the temporary site for information that has been recently used, while the permanent storage unit contains multiple storage bins with different functions

and is more similar to long-term memory (Scott, et al., 1991). According to Scott et al. (1991) representations of a conversation may be stored in different bins in our memory, giving us information to draw on in understanding that particular relationship.

*Knowledge structures*. As information is stored in specific nodes, and these nodes are linked together in a network, they inform knowledge structures. Berger (1997) states that, "the role played by knowledge structures is central to the generation of strategically communicative conduct" (p. 8). Knowledge may be structured in the form of goals, plans, scripts, roles and themes (Miller & Read, 1991). Once people perceive certain behaviors and events, knowledge structures allow them to make inferences and then link these inferences into understandable models of people, situations and relationships (Miller & Read, 1991). People gain knowledge through their social experiences, and it is this knowledge that allows them to interpret and perceive communication (Scott, Fuhrman & Wyer, 1991). Individuals may gain knowledge, and thus build knowledge structures, both directly through their own experience, and vicariously through the observation of others (Berger, 1997). Knowledge structures can be very abstract, for example knowing that "if you smile at people they will generally smile back at you," or they can be very specific, such as knowing that "Pat Smith adores vanilla yogurt" (cf. Berger, 1997, p.8).

As knowledge stores provide information for understanding and interpreting communication and other behaviors, they also provide an organizational system for storing knowledge in memory. Once a person begins to observe, perceive and understand the behavior of a relational partner, thoughts about that relationship become embedded in memory. "Memories are important because they forge links between the past and the

present, engendering a sense of permanence and stability . . . [and] they provide a useful framework for understanding and interpreting current behaviors or events in the relationship" (Holmberg & Veroff, 1996, p. 345-346). Knowledge structures are related to interactional behavior and ultimately affect the outcome of relationships (Fletcher & Thomas, 1996). According to Surra and Bohman (1991), "knowledge structures are organized, structured stores of information that result from prior information processing and that affect the subsequent interpretation and organization of information" (p. 286).

Three types of knowledge structures that are important in close relationships are prototypical conceptions and assessments of relational constructs, causal accounts, and relationship-specific schema (Surra & Bohman, 1991). The first allows for an understanding of important concepts such as love, commitment and trust. The second allows for an understanding of why things happen. The third and final structure includes "representations of traits, beliefs, behaviors and action sequences" that apply to a particular relationship (Surra & Bohman, 1991, p. 288). Knowledge structures are likely activated by a combination of verbal and nonverbal behavior (Berger, 1997). Once these particular patterns of verbal and nonverbal communication activate knowledge structures, they will then lead people to make particular inferences, goals and plans (Berger, 1997).

*Scripts and schemas*. Scripts and schemas influence and explain a person's interaction with others. People have scripts that are cognitively represented in their minds for different relationship scenarios and communication events (Forgas, 1991). "A script is a set of expectations about what will happen next in a well understood situation" (Schank & Abelson, 1995, p. 5). Relational schemas are cognitive structures that form when a person repeatedly engages in similar interaction with another (Baldwin, 1992). These

relational schemas include a script for the interaction and a schema for both self and the other (Baldwin, 1992) and may also serve as memory structures, which organize relevant information or priming procedures (Baldwin, 1995). Relational schemas not only guide a person's expectations and interpretations of the behavior of others, but they also improve memory for past information relevant to a particular schema, and influence memory for "new information that is relevant to the stored knowledge" (Baldwin, 1992, p. 474).

*Retrieval*

Certain information tends to be more readily retrieved from memory. The frequency with which we experience something affects our ability to remember it. Human memory is able "to keep track of the repetitiveness of events" in what many researchers say is an automatic manner (Zechmeister & Nyberg, 1982, p. 173). Studies have shown that people recall highly frequent words better than they recall less frequent words (Baddeley, 1998).[1]

Primacy and recency are other factors that affect memory (Zechmeister & Nyberg, 1982). Things that appear at the beginning of a list or series (primacy) will be recalled better than later items. Similarly, events that happened recently, or things that appear at the end of a series of events (recency) will be remembered better than earlier events. As applied to conversational memory, those conversations that occur with

[1] It is important to point out here that I am only discussing recall and not recognition. The word-frequency effect has opposing results for recall and recognition (Zechmeister & Nyberg, 1982). High-frequency words are better recalled than low-frequency words, while low-frequency words are better recognized than high-frequency words. This thesis will focus on memory retrieval and conversational recall.

frequency, such as asking a child to pick up his or her toys, and those conversations that have occurred in the recent past, such as the dialogue that took place in the last five minutes of time, will be recalled more accurately and in more detail.

As well, novel information, or that which is different than expected, will be better remembered. Bower, Black and Turner (1979) found that "goal-relevant deviations from a script were remembered better than script actions" (p. 177). They suggested that interruptions and deviations in a script are remembered better because they appear more important and therefore draw more attention or require deeper processing. Bower et al. (1979) had participants read script-based stories and included three types of interruptions in each: an obstacle, an error and a distraction. Participants then had to rewrite the stories as precisely as possible. Results of this study showed that memory for new things, which differed from that which was expected, was greater than memory for the other expected details of the script. This same concept may be applied to conversational memory. Kellerman (1995) explains that "memorable conversations would be ones that were quite different in many respects from other conversations" because ". . . the aspects most likely to be recalled are those where the person, situation, topic, or other behaviors deviated in some way from expectations" (p. 203). When people engage in a conversation that is new or different than expected they will be more likely to remember it better than other conversations.

In initial interactions people focus on managing impressions and making assessments of the other person, which affects memory for conversation, and leads to different memories for actors than for observers (Stafford, Waldron & Infield, 1989). Participants and observers have different memories for conversations (Benoit & Benoit,

1994; Benoit, Benoit, & Wilkie, 1995) and participants' memories are more accurate (Benoit, Benoit, & Wilkie, 1995).

There are several theories regarding retrieval. Two communication-based theories that will be discussed here are Action Assembly Theory and the Cognitive Rules Model. Action Assembly Theory is based upon network representations known as procedural records, which are stored in long-term memory (Greene & Geddes 1993). The retrieval and integration of these features from memory results in behavior (Greene & Geddes 1993). Once features have been retrieved, or activated, they are assembled, or integrated, into an appropriate output or behavior. If a person is unable to retrieve relevant information from memory, he or she will not be able to act on it, which may adversely affect social behavior and performance (Greene & Geddes, 1993). This means that behavioral information may be stored in our memories, but remains useless until it is activated. According to Greene & Geddes (1993) "activation depends upon the match between memory representations and current conditions" (p. 36).

Wilson's (1990) Cognitive Rules Model, which offers another explanation of the process of communication, is also based upon a network of information stored in long-term memory. While the action assembly theory focuses primarily on how information retrieved from memory affects behavior, the cognitive rules model explores the effects of information retrieved from memory upon goals.

A key element of interpersonal communication is the formation and implementation of goals. In any sort of interaction, the individuals involved have some sort of goal. Some examples of interaction goals may be to solve a problem, receive information, share an experience, or relax and enjoy the company of the other. Wilson

(1990) uses the Cognitive Rules Model to explain the structures and processes underlying goal formation. Cognitive rules may be directly activated by matching features of a situation directly to conditions in a rule, or indirectly when activation spreads throughout the associative network (Wilson, 1990). According to this model people have knowledge of numerous goals and their relevant features, which are stored in an associative network in long-term memory (Wilson, 1990). The network is made up of nodes representing different individual concepts. This is an associative network in that nodes are linked together, and activation of one node may spread and activate other nodes in the network (Wilson, 1990). The Cognitive Rules Model "assumes that goals are formed when cognitive rules are activated past a threshold level, and that the probability of goal formation is a function of fit between rules and perceptions of the situation, rule strength, and recency of rule activation" (Wilson, 1995). In other words, cognitive rules will be triggered by fit, when a large number of the rule's criteria are present in the situation, by strength, when the situation has occurred frequently in the past, or by recency, when the rule has been activated recently (Wilson, 1997). Once the required activation level is reached, a rule is triggered, and at that point a goal is formed (Wilson, 1990). For example, a person may form the goal to "demand an explanation" when one of the following situations activates and triggers the goal: "interaction partner has failed to meet some expectation," "interaction partner did something he or she was specifically asked not to do," or "interactio n partner intentionally caused harm or problems". Cognitive rules, stored in long-term memory, are triggered when a certain threshold of activation is reached, and then a goal is formed (Wilson, 1997). The cognitive rules

model may also explain why interaction goals vary among individuals, within different situations, and in different cultures (Wilson, 1997).

*Conversational Memory*

The cognitive perspectives reviewed thus far highlight that knowledge encoded into memory has implications for the retrieval and production of communication messages. Further, those perspectives have implications for an understanding of conversational memory. Specifically, information is encoded into nodes in the brain, which are part of a larger network, and organized based upon the script or schema that it relates to. In order to later retrieve this information those same nodes must be activated through the network. Conversations are stored in memory in a similar way. They are organized in different nodes based upon other relevant information already stored within the network. To retrieve information from a given conversation, the nodes containing that conversation, or parts of that conversation must be activated. If information is stored in certain parts of our brains, or certain parts of our network, and can only be retrieved upon activation, it is understandable that certain conversations may be lost in our memory. If the proper connections are not activated, or the necessary threshold is not reached in order to activate a particular node, then knowledge will not be retrieved. In this way our memory for conversations is dependent upon how the conversation was stored in the network, and how the network is activated for retrieval.

However, few people have examined conversational memory explicitly. One theorist has presented a model of the process (Kellerman, 1995), and others have looked at accuracy of conversational memory in short-term memory (Stafford & Daly, 1984), and long-term memory (Stafford, Burggraf, & Sharkey, 1987) as well as differences

among participants and observers (Stafford, Waldron & Infield, 1989; Benoit & Benoit, 1994; and Benoit, Benoit & Wilkie, 1995). Kellermann (1995) uses MOP theory to explain how conversations are stored in memory. A MOP, or memory organization packet, organizes scenes in memory (Schank, 1982). According to Schank (1982) different structures represent what he calls "domain-dependent knowledge" (p. 109). Moving from a narrow to broad working of memory, scripts represent common instances in a scene. Scenes organize specific memories. MOPs "do not explicitly contain memories" but rather "organize scenes that contain memories" (Schank, 1982, p. 95). The broadest level includes metaMOPs, which organize MOPs. Specifically, "a MOP consists of a set of scenes directed towards the achievement of a goal. A MOP always has one major scene whose goal is the essence or purpose of the events organized by the MOP" (Schank, 1982, p. 97). According to Schank (1982) MOPs may occur at three levels, the physical, societal and personal, organizing scenes relevant to each domain. "Physical and societal MOPs are culturally shared knowledge structures, whereas personal MOPs are idiosyncratic in their development" (Kellerman, 1995, p. 184). An example of Schank's (1982) organization structure would be a MOP surrounding "airplane," which includes the scenes "check-in," "waiting area," "boarding," sit-in-the-plane," "deplane," and "collect-bags." Any one of these scenes may include a script. Schank points out that different MOPs may share scenes with other MOPs, for example "waiting area" is a scene used by the airplane MOP as well as the doctor MOP and others. Specializations of the scene will allow a person to determine which MOP it belongs to. Schank (1999) states that all MOPs come from goals, making MOP theory somewhat comparable to the Cognitive Rules Model mentioned earlier.

Because of the way information is stored in memory, conversational behavior can be both stable and changing, routine and flexible (Kellerman, 1995). MOPs are used to "process and understand conversations as well as to generate and guide them" (Kellerman, 1995, p. 200). Conversations are divided and stored in different, relevant memory structures (Kellermann, 1995). Different aspects of the conversation are stored in different places, specifically different scenes, which explains why people only remember pieces of the conversation, or remember where they were but not who they were talking to (Kellermann, 1995). "Recall of a given episode requires that the scenes initially used to process the episode be relocated" (Kellerman, 1995, p. 202). This becomes problematic when a person cannot remember exactly which scenes were produced during a particular conversation (Kellerman, 1995). Conversational MOP theory gives a clear example of how knowledge stores influence communication. If knowledge from a conversation is stored within different scenes in memory, then the possibility of not being able to obtain all the information regarding that particular conversation is relatively high. As people recall only bits and pieces of conversations, and possibly very different bits and pieces than their partner, there is an increased likelihood that the communication between these individuals will be adversely affected.

*Memory for Conversations*

As individuals we each have our own network into which information is stored. People may store the information differently, meaning that the memory will be triggered differently for each individual. This means that people may engage in a conversation together, but store the conversation differently, and therefore require different activation cues in order to recall the conversation. For example, a man and woman may have a

conversation about the high cost of their electric bill. The man may store the conversation with other things that he worries about, i.e. making the mortgage payment, being successful at work, home security and the safety of his children on the school bus. The woman may store the same conversation under a very different category, reasons she works full time, and other topics in this network may include personal gratification, purpose in life, provide money for bills and savings, and personal interest. In order for the man and woman to retrieve this conversation from memory, very different topics must be activated in their network. If the appropriate cues are not activated, one person may experience total or partial loss of memory for this conversation. For a person to forget a significant conversation, or one that is significant to his or her relational partner, may be devastating to the partner, and cause hurt, tension or argument within the relationship. In this way ability to recall a conversation and the memory processes entailed may have a significant impact on any close relationship.

Previous research has given us some information regarding conversational memory. Based on this work, memory accuracy for conversations is limited (Stafford & Daly, 1984) and decreases with time (Stafford et al., 1987). People are able to remember much more of what their partner says in an interaction than what they themselves say (Stafford & Daly, 1984), and tend to report more information about their partner than themselves (Stafford et al., 1987). As well, those using verbal recall, as compared to written recall, include a great deal of redundancy and elaborations in their memories for conversation (Stafford & Daly, 1984; Stafford et al., 1987). Observers' memories are less accurate than those that actually participated in the conversation (Benoit & Benoit, 1994; Benoit et al., 1995). Despite the information provided in previous studies on the

workings of conversational memory, there is still much to learn about this subject. In the aforementioned studies, participants were not acquainted with one another prior to taking part in the study, meaning that the interactions reported were those of strangers meeting for the first time. It would be valuable to know if there are differences in the conversational memories of strangers and close friends. There is also no previous empirical research regarding how different types of conversations (i.e. concordant/discordant) may affect participants' memories for conversation. In chapter three I will present a model to address these questions.

# CHAPTER 3

*Two Influences on Conversational Memory*

With an understanding of the phenomena of memory for conversation and a review of cognition as a framework for understanding communication and relational behavior, I will now advance to a model of conversational memory. Stafford and Daly (1984), Stafford, Burggraf, and Sharkey (1987), and Stafford, Waldron and Infield (1989) focus on the issue of small talk, and find that people remember little content from these conversations. This thesis extends Stafford's research by examining whether or not the type of conversation and the type of relationship affect conversational memory. The model posits two influences (type of interactant: close friend/stranger, and type of interaction: concordant/discordant) on the accuracy of conversational memory.

*Type of Interactant: Close Friend/Stranger*

As mentioned in Chapter 1, most research on conversational memory has involved strangers (Stafford & Daly, 1984; Stafford, Burggraf, & Sharkey, 1987; Stafford, Waldron, & Infield, 1989; Benoit, Benoit, & Wilkie, 1995), and those that have considered intimates (Sillars, Weisberg, Burggraf, Zietlow, 1990) have focused more on past relational events rather than specific conversations. This study contrasts conversational memory among individuals in close relationships and stranger relationships. Although there is some evidence that strangers may recall more of a conversation than those in a close relationship, most research points to intimate partners

having the greatest amount of recall for their conversations. The following findings will lay the groundwork for my first hypothesis.

It is conceivable that because close friends have had many more conversations with one another than strangers, it may be harder to remember details from a specific conversation. Close friends may remember things as they expect them to be from past experiences and interactions, rather than focusing on the current conversational issue. Strangers may have greater recall in this case because they only have one conversation to store in memory. A related memory theory explains one possible effect of relationship type on recall.

The theory of transactive memory is that people in close and continuing relationships develop a division of labor regarding the encoding, storage and retrieval of information (Hollingshead, 1998). In other words, intimate partners will be aware of the strengths and interests of one another, therefore holding the most interested person responsible for remembering the details of a situation, explanation or presentation. This combined, or transactive, memory is greater than the partners' individual memories (Wegner, Raymond, & Erber, 1991). Research on transactive memory systems has shown that couples may have a greater combined memory than strangers (Wegner et al., 1991; Hollingshead, 1998). In studies considering transactive memory, dating partners and strangers were asked to study lists of words or sentences with underlined words that were arranged in specific categories (Wegner et al, 1991; Hollingshead, 1998). Later the participants were asked to recall as many words as possible from the lists. Although the current study focuses on conversational recall rather than word recall, findings from transactive memory research may still apply. Since each partner may be responsible for

remembering different events, activities, or situations, the potential for differing conversational memories may be increased among those involved in close personal relationships.

However, more research suggests and supports the idea that conversational memory may actually be enhanced among individuals who are involved in a close relationship as compared to other types of relationships. People in a close relationship may have different relational goals than individuals who are meeting for the first time or are only acquaintances. Intimates may have a greater need to remember details of their conversations because they know they will interact with frequency in the future and therefore may be more driven to remember their conversations. Benoit and Benoit (1994) found that people who believe they have a choice as to whether or not they will have to interact with their conversational partner again have a poorer memory for the conversation than those who do not have a choice in future interaction.

As well, those who are involved in an intimate relationship may have better recall of conversations than strangers simply because intimates have had more experience with one another. Stafford and Daly (1984) suggest that one reason they found such a low percentage of recall for conversations is that their participants were not previously acquainted and took part in "acquaintance small talk," a type of exchange that "may be necessary, but not memorable, social rituals" (p. 394). Strangers may be distracted from the actual content of the conversation by such things as trying to determine compatibility, mutual interest and liking.

Based on the aforementioned research findings it is likely that those who are involved in a close relationship will remember more of their conversations than those who are strangers. In short:

*H1*: Intimates will accurately remember more content of the conversation than strangers.

*Type of Interaction: Concordant/Discordant*

Next I consider differences in memory among intimates and strangers engaged in a concordant conversation versus those engaged in a discordant conversation. A concordant conversation is one in which individuals agree with one another, interact positively, and are able to get along with one another. A discordant conversation is one in which individuals do not agree with one another, are argumentative, and do not get along with one another. People generally expect to get along with one another, therefore the discordant conversation will be unexpected. As mentioned earlier in chapter two, people tend to remember conversations that deviate from their expectations (Bower et al., 1979; Kellerman, 1995). If someone's expectations are met, the conversation may not be as memorable as if his or her expectations were not met. Therefore, the discordant conversation should be more memorable than the concordant conversation because it is unexpected. Expectations for the conversation will be assessed both before and after the conversation. Those participants whose expectations were not met will likely remember the conversation better. Goss, Neuliep and O'Hair (1985) found that "negative arousal *during recall* inhibits the retrieval of previously stored information" (p. 204). Individuals exposed to negative arousal during the recall process exhibited decreased memory for conversation as compared to those not exposed to negative arousal. Although this study

shows how negativity may affect memory during recall, we still do not know how negativity may influence the process of encoding. A discordant conversation should negatively violate individuals' expectations during encoding. Therefore I will compare the conversational memory of individuals in a concordant conversation with those in a discordant conversation to determine if negativity during the encoding process may also affect conversational memory.

According to Stafford, Burggraf, and Sharkey (1987), impression-forming and learning how to relate to a person in future interactions may be a more important goal in conversations than remembering details and content. Based on these findings I believe that people involved in a concordant conversation will have similar impression-related goals found among other people in casual conversations. For those people involved in a discordant conversation, impression may still be important, however I suggest that the content of the conversation will be more influential in this case. As mentioned earlier, a discordant conversation is generally unexpected. Research suggests that people have better recall of information that is unusual, or incongruent with one's expectations rather than congruent information (Hastie & Kumar, 1979; Srull, 1981; O'Sullivan & Durso, 1984; Hastie, 1984; Waddill & McDaniel, 1998). Hunt, Kernan and Bonfield (1992) summarize much of this literature in a statement that "atypical information is frequently remembered better than schema-typical information" (p.346).

Furthering this point, people generally expect to get along with other individuals. Because of these expectations, a concordant conversation will appear normal and actual content will be recalled with similar degrees of accuracy to those found in previous studies by Stafford et al. (1984, 1987). A conflict is generally not expected among

intimates or strangers, therefore desire to resolve the conflict and to determine the cause of the argument will lead people to focus more intently on the content of the message. Inline with the earlier mentioned findings, an unexpected, discordant conversation will be remembered better than an expected, concordant conversation.

Research points to 'the situational role as a vitally important determinant of how people construct interpretations" (Baumeister & Newman, 1995, p. 101). Studies have shown that depending on the role of a person in a particular situation, the story of what happened may be interpreted differently, for example the story of a victim will be different from that of a perpetrator (Baumeister, Stillwell & Wotman, 1990), just as an unrequited lover will offer a different story of the failed romance than the one who rejected the lover (Baumeister & Wotman, 1992). Likewise a partner's role in a conversation (i.e. attacker, defender) may affect that person's memory for the conversation at a later date. Ross and Holmberg (1992) found that the loser of an argument recalled the event more vividly. Based on the view that discordant conversations are incongruent with expectations and the research supporting incongruent information is better recalled, I expect those who participate in a discordant conversation to remember more content than those who participate in a concordant conversation. Therefore:

> *H2:* For both intimates and strangers, those involved in a discordant conversation will accurately remember more content of the conversation than those involved in a concordant conversation.

Now that I have articulated my hypotheses and offered reasons for these ideas, the next chapter reviews an investigation designed to examine the proposed associations.

# CHAPTER 4

## Stimulus Development and Method

I tested conversational memory in two new realms of study. The first focal point compared conversational recall of close friends with conversational recall of strangers. The second focal point compared individuals who engaged in a concordant conversation with individuals who engaged in a discordant conversation. Stafford, Burggraf, and Sharkey (1987) suggest that relational information is possibly more important, and therefore recalled more often, than actual content among people involved in a casual conversation. I tested conversational memory of close friends and strangers involved in a concordant conversation, which may be considered a more casual conversation, and people involved in a conflict, or discordant conversation, which may be less casual and more content focused.

Participants engaged in a five-minute conversation with both a friend and a stranger. The conversation topics were chosen through a pre-test. One person from each dyad was randomly selected ahead of time to create either a concordant or discordant interaction. After the conversations, participants were asked to recall in writing as much as they could from the conversation with their partner. The following sections lay out the details of both the pretest and the main study.

### *Stimulus Development*

The stimulus development involved two stages. First, hypothetical scenarios involving campus or community related issues were drawn from two sources: an upper-

level communication class and several research assistants. Then, a pretest of the scenarios allowed for the selection of the actual discussion topics used in the main study.

The list of topics was pilot tested to ensure that the conversational topics were of interest to most students. I wanted my participants to discuss current campus or community issues, so an upper-level communication class and several research assistants were asked to brainstorm a list of topics that they believed were relevant current campus or community issues affecting a large number of people at UGA. Once a list was compiled, I narrowed it down to ten topics and created discussion scenarios for each topic. The actual scenarios are listed in Table 1. Topics tested were campus parking, campus safety, tuition prices, cell phones, campus transit, construction, homelessness downtown, class schedules, smoking and underage drinking. Pilot test participants were asked to rate on a 1-5 Likert-type scale, with 1 being strongly disagree and 5 being strongly agree, how interesting and important each topic was, whether or not it affected them or others, whether they would be able to have a conversation with someone about the topic and if they ever have had a conversation about the topic. Statistics for interest, importance and whether or not a participant would have a conversation with someone on this topic were deemed as most relevant for choosing topics for actual use in the study. These statistics can be found in Tables 2, 3 and 4 respectively. The pilot test included 98 participants, 48 male, 42 female and 8 who did not specify their sex. Participant age ranged from 19 to 27 and the mean age was 21.5. Most participants were juniors and seniors, and 86.7% were Caucasian, 5.1% were African American and the rest were other races. I found that several of the topics were significantly higher than the test value of 3. A value of 3 indicates neutrality regarding the topic, a value of 4 indicates that the

individual agrees that the topic is interesting, important or they would have a conversation about the issue, and a value of 5 indicates that the participant strongly agrees. Having several topics rate significantly higher than the mid-point means that there were a number of topics that pilot test participants found interesting and important. Therefore, in selecting the two topics to be used in the study I had to consider the content of the topics. After looking at the content of each topic I chose two that seemed to be applicable to a large number of students and that included several sub-points, offering a variety of sub-topics within the main topic to be discussed. It was important that students be able to carry on a five minute conversation about each topic, so I chose topics that included a variety of issues to be discussed regarding resolution of the problem. Since many students have to deal with parking on campus, and in this age of technology it is likely that most students do possess a cell phone, these topics seemed to be most applicable to a variety of students, as well as having several sub-issues to discuss, thus lengthening conversation time. Therefore, the two conversation topics chosen for the main study were campus parking and cell phones on campus.

Table 1

Pretest Conversation Topics

| |
|---|
| Campus Parking : The changes in the parking structure enacted this year have been a topic of great discussion this semester. Many people are dissatisfied with the new changes and UGA administrators are under increasing pressure to make additional changes to the current policies. A recent survey of faculty, staff and students about the parking issue solicited the following suggestions about how to change parking policies: no freshman parking, priority by credit hours, commuter parking only—no parking if you live in a dorm, University should build more parking lots/decks, parking should be free for all students. |
| Campus Safety: A number of rapes, robberies and other violent acts have occurred on the UGA campus over the last few years. It is the desire of the UGA administration that the University be a safe place for all students, faculty and staff. Some suggestions for creating a safer atmosphere include: hiring more campus police to patrol the University campus, adding more lights to parking lots, sidewalks and dorm areas, and enforcing stricter punishments for those convicted of criminal acts on the UGA campus. |
| Tuition Prices: Many students and parents have complained that tuition for UGA is too high. Those who have complained about the price of tuition have included the following suggestions for making tuition more manageable: stop wasting money on unnecessary construction and renovations, increase the cost of other optional activities (such as sports ticket prices) in order to decrease the cost of mandatory tuition fees, and offer more need-based scholarships to both potential and current students. |
| Cell Phones: With more and more people owning cell phones many professors and students believe that they are creating a big problem in the classroom. Many students are late to class because they are standing outside talking on their cell phones. Cell phones going off during class often interrupt lectures and discussions. Frustrated administrators and teachers are trying to come up with a way to end these and other problems due to cell phones on campus. Some of the options include professors having strict policies regarding cell phones ringing during class (i.e. if a cell phone rings student must leave class and not return, receiving no credit for attendance, or points being deducted from final grade if cell phone rings during class) as well as the university enacting campus-wide policy regarding cell phones similar to the "no phone zones" in the library. |
| Campus Transit: Students have raised a number of complaints regarding campus buses. Many students have said that the buses run late and are unreliable, causing them to be late for classes. Others have complained that buses are too crowded and there just aren't enough buses on certain routes. Some of the suggestions for resolving these problems include hiring more reliable bus drivers, purchasing more buses, creating rules regarding bus riding (i.e. only students with disabilities or those who have more than a half mile to get to their next destination can ride the bus). |
| Construction: Many people are frustrated by the continued construction both on campus and downtown. Construction creates traffic congestion, lots of extra noise, an ugly environment and decreases parking availability at times. Some ideas for decreasing frustrations caused by construction include: eliminate all unnecessary construction, rather than doing construction projects during the school year only work during the summer months and the winter break, and create stricter contracts with construction companies so that construction jobs will not last any longer than is absolutely necessary. |
| Homeless Downtown: Many people are bothered by the number of homeless people who hang out downtown. A lot of people dislike consistently being asked for money. Others are frustrated by the fact that they have a hard time finding a bench to sit on downtown because of the homeless people loitering or sleeping there. There have also been incidents of homeless people sleeping in UGA buildings located near downtown, which can be very unsettling to students, faculty and staff who are working in the buildings late in the evening or early in the morning. Some ideas for decreasing the problem are to create stricter laws regarding excessive loitering downtown or sleeping downtown and on University premises, and open more homeless shelters in the Athens community that will help homeless to get a job and a place to live. |
| Class Schedules: Each semester students are turned away from much needed classes because they are full. Many students complain that they are not able to graduate on time because it is so hard to get into the necessary classes. In order to ensure students that they will be able to get into necessary classes, the following proposals have been made: hire more faculty to teach classes that fill up quickly, create more large lecture classes so that more students can enroll in each course, offer a larger variety of classes during summer sessions, and offer accelerated courses that can be completed in 8 weeks so that two sections of the same class can be taught each semester rather than just one. |
| Alcohol: Many people in the Athens community have complained about the excessive alcohol consumption and underage drinking that occurs downtown and in other parts of Athens. Concerned community members are asking the Athens-Clarke County to crack down on problems related to alcohol abuse and overuse. These community members have made the following suggestions to decrease alcohol-related problems: create stricter laws regarding underage drinking and alcohol possession, increase police presence downtown and in areas known for partying, and more heavily advertise programs such as Watch Dawgs and Dawgs After Dark which can deter people from drinking and driving, or drinking at all. |
| Smoking: Health reports show that smoking has many adverse health effects and second-hand smoke can be just as dangerous. Although a number of students, faculty and staff at UGA are smokers, many other members of the University community do not smoke and are bothered by cigarette smoke. Some people have suggested that smoking is creating a problem on campus. The following suggestions have been made to curb the problem: smoking should be banned from campus except for a few designated areas, and smoking should be banned within a ten foot radius of any campus building. |

Table 2

Scenario Statistics: Topic Is Interesting

| Topic | Min | Max | Mean | SD |
|---|---|---|---|---|
| Campus Parking | 1.50 | 5.00 | 4.3571 | .60496 |
| Campus Safety | 2.50 | 5.00 | 4.5102 | .55603 |
| Tuition Prices | 1.00 | 5.00 | 3.9694 | .81802 |
| Cell Phones | 1.00 | 5.00 | 3.5867 | .87645 |
| Campus Transit | 1.00 | 5.00 | 3.5510 | .97518 |
| Construction | 1.00 | 5.00 | 4.1122 | .78494 |
| Homeless Downtown | 1.00 | 5.00 | 3.8929 | .81307 |
| Class Schedules | 1.50 | 5.00 | 4.4031 | .69482 |
| Alcohol | 1.00 | 5.00 | 3.5255 | 1.01629 |
| Smoking | 1.00 | 5.00 | 3.7062 | 1.15188 |

Table 3

Scenario Statistics: Topic is Important

| Topic | Min | Max | Mean | SD |
|---|---|---|---|---|
| Campus Parking | 1.00 | 5.00 | 4.2177 | .65994 |
| Campus Safety | 2.67 | 5.00 | 4.3810 | .62955 |
| Tuition Prices | 2.00 | 5.00 | 3.9048 | .81650 |
| Cell Phones | 1.33 | 5.00 | 3.4422 | .88874 |
| Campus Transit | 1.00 | 5.00 | 3.5000 | .96235 |
| Construction | 1.67 | 5.00 | 4.0068 | .84677 |
| Homeless Downtown | 2.00 | 5.00 | 3.6837 | .83779 |
| Class Schedules | 2.33 | 5.00 | 4.3197 | .72101 |
| Alcohol | 1.00 | 5.00 | 3.6769 | .90367 |
| Smoking | 1.67 | 5.00 | 3.7835 | 1.01384 |

Table 4

Scenario Statistics: Would Have a Conversation on This Topic

| Topic | Min | Max | Mean | SD |
|---|---|---|---|---|
| Campus Parking | 1.00 | 5.00 | 4.1429 | .81228 |
| Campus Safety | 2.00 | 5.00 | 4.0153 | .82316 |
| Tuition Prices | 1.50 | 5.00 | 3.7959 | .85505 |
| Cell Phones | 1.00 | 5.00 | 3.4490 | 1.03667 |
| Campus Transit | 1.00 | 5.00 | 3.5153 | 1.01141 |
| Construction | 1.50 | 5.00 | 3.8980 | .77646 |
| Homeless Downtown | 1.00 | 5.00 | 3.6327 | 1.01674 |
| Class Schedules | 1.00 | 5.00 | 4.2092 | .75274 |
| Alcohol | 1.00 | 5.00 | 3.6276 | .92867 |
| Smoking | 1.00 | 5.00 | 3.6598 | .95347 |

*Participants*

Participants for the primary study were students at the University of Georgia. In order to control for possible gender differences in conversational recall, all participants were the same gender. Females were chosen because of their greater accessibility within the research pool. One hundred and forty-four dyads, or two hundred and eighty-eight individuals, participated in this study. The years in school of participants were as follows: 27 freshmen (9%), 54 sophomores (19%), 101 juniors (35%), 86 seniors (30%), and 19 other (7%). The ethnicity of participants was as follows: 239 caucasian (83%), 22 African American (8%), 12 Asian (4%), and 12 other (5%). Respondents engaged in a conversation with both a close friend and a stranger. All participants were gathered from the research pool for the Department of Speech Communication and received course credit or extra credit for their involvement.

*Design*

This study is a 2 (type of interaction: concordant vs. discordant) x 2 (type of relationship: close friend vs. stranger) x 2 (order of interactions: friend first or stranger first) x 2 (conversational role: participant or confederate) design with all factors between subjects except type of relationship.

*Procedure*

Participants were required to bring a close friend with them to the study. I had two pairs of close friends participating at the same time so that each participant could interact with both a close friend (the person that she came with) and a stranger (a person from the other dyad). These two dyads were called a group and I had eighteen groups in each of four interaction possibilities. Eighteen groups had a concordant conversation with their friend first. Eighteen groups had a concordant conversation with a stranger first. Eighteen groups had a discordant conversation with their friend first. Eighteen groups had a discordant conversation with a stranger first. When participants arrived at the lab they were separated from their conversational partner and taken to different rooms. Once separated, they filled out several pretest measures, including demographic measures, and interaction expectancies. Once the pre-conversation expectancy form was completed participants were informed individually that they would have a five-minute conversation either with the close friend that they came with if they were in the close friend situation first, or with a stranger if they were in the stranger situation first. The topic of conversation was always "campus parking" for the first interaction, and "cell phones on campus" for the second interaction.

Based upon random assignment to rooms, one person from each dyad was selected by the researcher to be instructed as a confederate. Confederates were instructed to create either a concordant conversation or discordant conversation with their partner. Confederate roles were assigned without replacement to assure an equal distribution of conversation conditions.

In the concordant conversation the confederate was told to "agree with your partner. Accept, support, encourage, and go along with whatever she says." In the discordant conversation the confederate was told to "disagree with your partner. Reject, deny, discourage and argue with whatever she says." In other words, both partners were told that they would have a five-minute conversation with another individual regarding a current campus issue, but only one partner was instructed specifically on how to interact with her partner. Once the confederates felt comfortable with the task, their conversational partner was brought into the room. After both partners were seated in the room together they were reminded that they would have a five-minute conversation regarding the specific campus issue chosen. They were informed that their conversation would be audio-recorded. The experimenter read aloud the conversation topic, started the tape-recorder and a timer, and left the participants alone in the room. Five minutes later the researcher returned and stopped the tape.

After this conversation the participants were again separated into different rooms. As per prior research (Stafford & Daly, 1984; Stafford, Burggraf & Sharkey, 1987; Benoit, Benoit & Wilkie, 1995), respondents individually viewed a five-minute film clip as a distracter to control for short-term memory effects. Because the clip was simply supposed to distract the participant from the conversation she had just had, it was

important that the video not arouse the participant in any way or affect her emotional state. Therefore two rather mundane topics were chosen: kitchen countertops and model car garages. The kitchen countertops video was always watched following the first interaction and the model car garages video was always watched after the second interaction. After the distracter clip all respondents were instructed to "recall in writing as much as you can from the conversation you had. Try to rewrite the conversation word-for-word using as much detail as you can remember." Finally, they filled out several post-conversation measures to determine if their expectations for the interaction were met. This form served as a manipulation check to determine if the concordant and discordant conversations were significantly different from one another. Following the stranger interaction the forms included several additional questions in order to ensure that all stranger interactions occurred with two people who actually were strangers. For example: "The person I talked to was a stranger," "I have never interacted with this person before today." If they had had any previous interaction with this individual, participants were asked to explain how they knew their partner and the nature of the previous interaction. When participants finished the post-conversation measures, they were debriefed and dismissed.

*Coding Procedure*

Once the data was collected, all conversations were transcribed. Then each transcribed conversation and each participant's recall of the conversation was unitized. Transcribed conversations were broken down into idea units. Other researchers (Stafford & Daly, 1984; Stafford, Burggraf, & Sharkey, 1987; Stafford, Waldron, & Infield, 1989) have used a similar method to measure memory accuracy by breaking the conversations

into idea units, "the smallest units of meaning that had informational or affective value" (Stafford & Daly, 1984, p. 386). Examples of idea units are: "My name is Laura," "communication is my major," and "campus parking is a problem." Each idea unit was numbered, and a total was placed at the bottom of each transcript. Next the conversation recalls were broken down into idea units called recall units because they were part of recalled information. "Recall units are any memory of, any implication from, any description, any evaluation, or any elaboration of the conversation, the conversants, or the experience" (Stafford, 1982, p.102). Each recall unit was numbered and a total was placed at the bottom of each conversational recall. I had two people doing the unitizing. One person unitized 100% of the data, and a second person unitized 20% in order to check for inter-coder reliability. Guetzkow's (1950) U statistic standard for coder disagreement in unitization is below U = .10 and according to this standard the unitizing differences were acceptable (conversation transcript U = .009 and recall U = .006). The unitizing and coding rules can be found in the codebook, which are taken largely from Stafford's (1982) codebook and a variation of Stafford's rules used by Monahan (1995), located in Appendix 4.

The conversational data was then coded for content. Recall units were divided into several categories as described by Stafford (1982). Categories were reproductions, redundant reproductions, themes, elaborations, descriptions, evaluations, errors, and unclassifiables. A reproduction was anything that preserved the gist of the original conversation, either verbatim or in paraphrases. A redundant reproduction was a repeated reproduction. A theme was a summary statement not directly related to any one idea unit. An elaboration was any plausible detail that was not explicitly said in the conversation,

but could have been said. A description was any remark about the conversational interaction, including the description of the other person, participants' roles in the conversation, or the experimental setting. An evaluation was a subjective judgment with positive or negative bias regarding the conversation, the other person, what the other person said, or the experimental setting. An error was an incorrect recall of the conversation. Finally, an unclassifiable was anything that could not be classified in one of the above categories and included information not related to the conversation or the conversational interactants. More explicit definitions and examples of each category are detailed in the codebook in Appendix 4 and Table 5. Again two coders were used, both coding 20% in common in order to check for inter-coder reliability. One coder coded an additional 60% and the other coded an additional 20%. During this process it became evident that the reproductions category and the elaborations category were very similar, creating confusion for the coders. There was confusion in determining whether or not certain statements should be labeled as "preserving the gist" of the conversation, making them reproductions, or as "plausible" information consistent with the flow of conversation, making them elaborations. To avoid confusion I collapsed the two categories into one, and labeled the category as reproductions. Cohen's K for overall coder agreement was .74. This percentage indicates acceptable agreement (Bakeman & Gottman, 1992). Cohen's K for each individual category is as follows: reproductions .79, redundant reproductions .50, themes .75, evaluations .57, descriptions .67, errors .89, and unclassifiables .33. The percentage for reproductions, themes, and errors indicate acceptable agreement (Bakeman & Gottman, 1992). Although there is low agreement according to Bakeman and Gottman (1992) for redundant reproductions, evaluations,

descriptions and unclassifiables, who believe that kappas lower than .70 are cause for concern, Fleiss (1981) views kappas of .40 to .60 as fair and kappas of .60 to .75 as good, allowing me to accept the K's for redundant reproductions, evaluations and descriptions in this case. Agreement regarding the category of unclassifiables is still low, which is problematic and will be discussed further in the limitations section.

Table 5

Coding Categories

| |
|---|
| Reproductions (Rep): Recall units that preserve the gist of the original idea units. These may be verbatim or paraphrases. These recall units accurately reflect idea units that actually occurred in the conversation. |
| Redundant Reproductions (RR): The participant repeats a reproduction. In this case the person restates a previously stated reproduction. |
| Themes (T): Summary statements of the conversation that are not directly related to any one idea unit. These statements mention a topic discussed with no specific information about that topic. |
| Elaborations (el): Details not explicitly mentioned in the conversation, but that are plausible and could have been said. These inferences were not specifically stated, but could have been and are consistent with the flow of conversation. |
| Descriptions (d): Remarks about any aspect of the conversational interaction. This recall unit is intended to give a mental picture of the situation with no positive or negative bias attached. The participant may describe things about her partner, her own role in the conversation, the partner' s role in the conversation, or the experimental setting. Descriptions are impressions of the interaction not tied to any specific idea unit. |
| Evaluations (ev): An expression of a positive or negative bias. This is a judgment that is subjective and makes conclusion that all people may not reach. An evaluation can be made regarding the other person in the interaction, what the other person said, the conversation itself, or the experimental setting. |
| Errors (Er): Incorrect recall of one or more idea units. This is information that is incorrect or never occurred (not to be confused with plausible information as found in elaborations). |
| Unclassifiables (Unc): Anything that cannot be classified in one of the above categories. This is information that cannot go anywhere else. This information should not be about the conversation or the conversational interactants. |

*Measures*

*Conversation Expectancies.* As a manipulation check to test whether or not the discordant conversation deviated from the participant's expectations, expectancies were measured both before and after the interaction.

Before the interaction participants filled out a pre-conversation expectancy measure based upon twelve items: "I expect my partner to be easy to talk to," "I expect my partner to be difficult to talk to," "I expect my partner to be easy to get along with," "I expect my partner to be difficult to get along with," "I expect my partner to be friendly," "I expect my partner to be hostile," "I expect my partner to be argumentative," "I expect my partner to be kind," "I expect my partner to be rude," "I expect to enjoy talking to my partner," "I expect to get along with my partner," and "I expect to argue with my partner." Each item was rated on a Likert scale (1= strongly disagree; 5= strongly agree). Several items were reverse scored: "I expect my partner to be difficult to talk to," "I expect my partner to be difficult to get along with," "I expect my partner to be hostile," "I expect my partner to be argumentative," "I expect my partner to be rude," and "I expect to argue with my partner." Higher numbers indicate positive expectations. The pre-conversation expectancy items are included in Appendix 1.

After the conversation participants filled out a form that showed me whether or not their expectations for the conversation were met. These post-interaction measures included twelve items similar to those in the pre-interaction measure, which determined post-conversation impressions of one's partner. The items were as follows: "My partner was easy to talk to," "My partner was difficult to talk to," "My partner was easy to get along with," "My partner was difficult to get along with," "My partner was friendly," "My

partner was hostile," "My partner was argumentative," "My partner was kind," "My partner was rude," "I enjoyed talking to my partner," "I got along with my partner ," and "I argued with my partner." Each item was rated on a Likert scale (1= strongly disagree; 5= strongly agree). Again, several items were reverse scored: "My partner was difficult to talk to," "My partner was difficult to get along with," "My partner was hostile," "My partner was argumentative," "My partner was rude," and "I argued with my partner." Higher numbers indicate a positive impression.

As well, four items were taken from LePoire and Yoshimura's (1999) work with expectancies that read as follows: "My partner behaved the way I expect most people to behave," "My partner's behavior was appropriate," "My partner's behavior was unusual," and "My partner engaged in normal conversational behavior." These four items, along with a fifth item that read, "The conversation was not what I expected," were used to determine if the conversation was in-line with the participants' expectations. Two items were reverse scored: "My partner's behavior was unusual," and "The conversation was not what I expected." Once again, higher numbers indicate that the conversation was indeed in-line with one's expectations. These post-interaction items were also rated on a Likert scale (1= strongly disagree; 5= strongly agree). The conversation should be less in-line with participants' expectations if they were involved in a discordant interaction and more in-line with expectations if they were involved in a concordant interaction. The post-conversation expectancy items for friend interactions are included in Appendix 2, and those for stranger interactions are included in Appendix 3.

*Conversational recall.* Instructions for the conversational recall task read as follows: "Please recall in writing as much as you can from the conversation you had.

Try to rewrite the conversation word-for-word using as much detail as you can remember." This was compared to the actual content of the conversation in order to create a measure of conversational recall. Statements were coded as one of the following categories: reproductions, redundant reproductions, themes, descriptions, evaluations, errors and unclassifiables (as mentioned earlier, the elaborations category was combined with the reproductions category because of similarity and to decrease coder confusion). For each category a proportion was used to reflect the percentage of recall that fell into each category. In other words, for each participant I computed the proportion of recall statements that were reproductions, redundant reproductions, themes, descriptions, evaluations, errors and unclassifiables. To create the proportion each category was divided by the total number of recall units. Computing proportions allowed me to control for different amounts of recall among individuals (Stafford, 1982). Table 6 describes the mean proportions of each conversational code.

Table 6

Mean Proportion of Conversational Codes for Friend and Stranger Conversations

| | Friend Conversation | Stranger Conversation |
|---|---|---|
| Reproductions | .72 (.21) | .75 (.20) |
| Redundant Reproductions | .01 (.03) | .04 (.06) |
| Themes | .04 (.06) | .04 (.06) |
| Evaluations | .10 (.15) | .10 (.17) |
| Descriptions | .05 (.10) | .03 (.06) |
| Errors | .06 (.08) | .06 (.09) |
| Unclassifiables | .02 (.05) | .02 (.04) |

Note. Cell entries are means, values in parentheses are standard deviations. N = 288.

# CHAPTER 5

Analyses and Results

*Manipulation Check*

Before analyzing my data I had to do several manipulation checks in order to check for differences between the concordant and discordant interactions. I ran several t-tests comparing the discordant and concordant individuals in their responses to the pre-conversation expectancy measure, the post conversation impressions measure, and the post-conversation expectancy measure.

Pre-conversation expectancies were measured with twelve items: "I expect my partner to be easy to talk to," "I expect my partner to be difficult to talk to," "I expect my partner to be easy to get along with," "I expect my partner to be difficult to get along with," "I expect my partner to be friendly," "I expect my partner to be hostile," "I expect my partner to be argumentative," "I expect my partner to be kind," "I expect my partner to be rude," "I expect to enjoy tal king to my partner," "I expect to get along with my partner," and "I expect to argue with my partner." The responses were averaged to create the measure (overall: $\underline{M} = 4.18$, $\underline{SD} = .32$, $\alpha = .87$), those in the friend conversation ($\underline{M} = 4.50$, $\underline{SD} = .43$, $\alpha = .89$), and those in the stranger conversation ($\underline{M} = 3.82$, $\underline{SD} = .41$, $\alpha = .86$). One expectation regarding concordant and discordant interactants was that they would be very similar in their pre-conversation expectancy measures. After running a t-test I can confidently conclude that there was no significant difference between the mean of the concordant group and the mean of the discordant group. I

compared means of each group when they expected to speak to a friend and the means of each group when they expected to speak to a stranger. Expectancies were not significantly different for the friend or stranger conversations. Test results measuring conversation expectancy for a friend were as follows: *t(286) = 1.69, n.s.* Test results measuring conversation expectancy for a stranger were as follows: *t(285) = 2.00, n.s.* This tells me that all participants had similar expectations for a conversation with a friend and a conversation with a stranger, regardless of which type of interaction they would later participate in.

Post conversation impressions were measured with twelve items: "My partner was easy to talk to," "My partner was difficult to talk to," "My partner was easy to get along with," "My partner was difficult to get along with," "My partner was friendly," "My par tner was hostile," "My partner was argumentative," "My partner was kind," "My partner was rude," "I enjoyed talking to my partner," "I got along with my partner," and "I argued with my partner." The responses were averaged to create the measure (overall: *M = 4.30, SD = .49, á = .93*), those in the friend conversation (*M = 4.44, SD = .56, á = .91*), and those in the stranger conversation (*M = 4.16, SD = .57, á = .92*). After the conversation, impressions for those involved in a discordant conversation were expected to be lower than impressions for those in a concordant conversation. After running a t-test I can confidently conclude that there was a significant difference between the impression means of those who engaged in a concordant interaction and those who engaged in a discordant interaction. I compared the post-conversation impressions of each group after they had spoken with a friend and after they had spoken with a stranger. Test results measuring post-conversation impression for a friend were as follows: *t(283)*

*= 6.14, p < .001.* Test results measuring post-conversation impression for a stranger were as follows: *t(286) = 5.14, p < .001*. This tells me that there was indeed a difference between the impressions created in the concordant conversation and those created in the discordant conversation for both the friend interactions and stranger interactions. A significant difference here ensures that the confederates in the discordant interaction did indeed create the desired effect in both their conversation with a friend and their conversation with a stranger: an interaction that was argumentative, difficult, and not in-line with how one thought her partner would behave before the actual conversation.

Post conversation expectancies were measured with four items: "My partner behaved the way I expect most people to behave," "My partner's behavior was appropriate," "My partner's behavior was unusual," and "My partner engaged in normal conversational behavior." The responses were averaged (overall: *M = 4.13, SD = .55, á= .84*), those in the friend conversation (*M = 4.23, SD = .69, á= .82*), and those in the stranger conversation (*M = 4.03, SD = .62, á= .82*). The conversation should be less in-line with participants' expectations if they were involved in a discordant interaction and more in-line with expectations if they were involved in a concordant interaction. After running a t-test I can confidently conclude that there was a significant difference between the post conversation expectancies of those who engaged in a concordant interaction and those who engaged in a discordant interaction. Test results measuring post-conversation expectancy for a friend were as follows: *t(284) =11.32, p < .001.* Test results measuring post-conversation expectancy for a stranger were as follows: *t(286) = 10.08, p < .001.* This means that there was a significant difference between the concordant and discordant

interactions for both friends and strangers in regards to how the conversation and one's partner met expectations.

In summary, the manipulation check evidences several important pieces of information regarding the concordant and discordant interactions. First of all, the manipulation check shows me that before the conversations ocurred, all participants had similar expectations for an interaction with a friend and similar expectations for an interaction with a stranger, regardless of whether or not they ended up in a concordant or discordant situation. Secondly, there were distinct and significant differences between the post-conversation impressions and post-conversation expectancies of those involved in a concordant interaction and those involved in a discordant interaction. This suggests that the confederates were able to successfully create the desired interaction type (concordant or discordant), and they were able to do this with both a friend and a stranger. Knowing that there was indeed a difference between the concordant and discordant interactions, the first being more agreeable and the second more disagreeable, allows me to move on to an in-depth analysis of my actual hypotheses.

*Examination of Hypotheses*

The first analysis addressed how much content participants recalled from their conversations. Recall was computed as the proportion of idea units in the actual conversation that were recalled by the participant (Stafford & Daly, 1984). The overall mean number of idea units in conversations was 104.33 (SD = 18.58, range: 47.50-159). The mean number of recall units produced by participants was 19.90 (SD = 6.95, range: 6.50 - 47). Participants reproduced an average of 14.58 idea units (SD = 5.99, range: .50-35.50). Transformed to proportions, the mean proportion of idea units reproduced in

recall sessions was .143 (SD = .06, range: 0-.33). This suggests the best participant recalled 33% of the conversation and the worst recalled none, with an overall average of about 14% recall. As compared to Stafford and Daly's (1984) results, their respondents recalled 10% of the conversation five minutes later, and my respondents recalled 14% of the conversation five minutes later. A t-test suggests that my results (M = 14.58, SD = 5.99, n = 104.33) were significantly different from Stafford and Daly's (1984) results (M = 19.92, SD = 16.46, n = 196.86). Test results comparing percentage of recall among my participants with percentage of recall among Stafford and Daly's (1984) participants were as follows: $t(103.33) = 5.672, p < .0001$. Possible explanations for a significant difference in recall between the two studies will be discussed later.

Next I separated friends and strangers to determine the amount participants recalled specifically from a friend conversation and specifically from a stranger conversation. Results for friends and strangers were as follows. The mean number of idea units in friend conversations was 102.67 (SD = 23.23, range: 24-159). The mean number of recall units produced by friend participants was 20.07 (SD = 8.37, range: 4-61). Friend participants reproduced an average of 14.30 idea units (SD = 6.97, range: 0-41). Transformed into proportions, the mean proportion of idea units reproduced in recall sessions following a friend conversation was .146 (SD = .08, range: 0-.58). This suggests that the best participant recalled 58% of the friend conversation and the worst recalled none, with an overall average of about 15% of friend recall. The mean number of idea units in the stranger conversations was 105.98 (SD = 23.15, range: 29-169). The mean number of recall units produced by participants in stranger interactions was 19.72

(SD = 7.95, range: 5-50). Participants in stranger conversations reproduced an average of 14.86 idea units (SD = 6.99, range: 0-44). Transformed to proportions, the mean proportion of idea units reproduced in recall sessions following a stranger conversation was .146 (SD = .07, range: 0-.48). This suggests the best participant recalled 48% of the conversation and the worst recalled none, with an overall average of about 15% of stranger recall.

In order to determine whether or not the research hypotheses were supported, I conducted several repeated measures analyses of variance (ANOVAs). Each analysis included four independent variables. One independent variable was within subjects: the type of relationship (friend or stranger). The remaining independent variables were between subjects: type of conversation (concordant or discordant), order of interaction (friend first or stranger first), and conversational role (confederate or participant). The dependent variable for each analysis was one of the proportional measures of conversational recall (as per Stafford et al., 1987). The significant results of each analysis are reviewed. It is necessary to mention at this point that the confederates may have been affected by their foreknowledge of the conversational objectives. Therefore, it was important to consider the results of the respondent data apart from the confederate data. I have analyzed all participants together as well as separated out the respondent and confederate data for analysis. The significant results for each category of recall are expressed first according to an overall analysis and second according to the separation of respondent and confederate data.

*Reproductions*. The first analysis considered the influence of type of relationship, type of conversation, order of interaction, and conversational role on the proportion of

reproductions included in recall statements. Analyses indicated a significant main effect for reproductions, $F\ (1, 280) = 8.10, p < .01, \eta^2 = .03$. As well, there was an interaction effect for order, such that those who interacted with a stranger first, had a higher proportion of reproductions in their recall statements ($M = .74, SD = .22$) than those who interacted with a friend first ($M = .69, SD = .19$), $F\ (1, 280) = 8.36, p < .01, \eta^2 = .03$. All other comparisons were non-significant.

Specifically considering respondent data, analyses indicated a significant main effect for reproductions, $F(1, 140) = 4.40, p < .05\ \eta^2 = .03$. As well there was an interaction effect for order such that those who interacted with a stranger first had a higher proportion of reproductions ($M = .75, SD = .24$) than those who interacted with a friend first ($M = .69, SD = .20$), $F\ (1, 140) = 5.20, p < .05, \eta^2 = .04$. Specifically considering the confederate data, analyses indicated no main effect and no interaction effects for reproductions.

Hypothesis one suggests "intimates will accurately remember more content of the conversation than strangers." In analyzing the within subject variable (type of relationship: friend or stranger), results indicate that the proportion of reproductions was greater for stranger interactions ($M = .75, SD = .20$) than for friend interactions ($M = .72, SD = .21$). Although these results do not support hypothesis one, they are important because the proportion of reproductions is significantly different between friend interactions and stranger interactions, $F\ (1, 287) = 8.02, p < .01, \eta^2 = .03$, only the significance is in the opposite direction than originally hypothesized. Hypothesis two suggests that "for both intimates and strangers, those involved in a discordant conversation will accurately remember more content of the conversation than those

involved in a concordant conversation." Based upon the analyses of reproductions, hypothesis two is not supported.

*Redundant Reproductions*. The second analysis considered the influence of type of relationship, type of conversation, order of interaction, and conversational role on the proportion of redundant reproductions included in recall statements. Analyses indicated a significant main effect for redundant reproductions, $F\ (1,280) = 80.90,\ p < .001,\ \eta^2 = .22$. As well, there was an interaction effect for interaction type and order, such that those who interacted with a stranger first in a discordant conversation, had a higher proportion of redundancies in their recall statements ($M = .06,\ SD = .06$) than those who interacted with a friend first in a discordant conversation ($M = .03,\ SD = .05$), $F\ (1, 280) = 6.08,\ p < .05,\ \eta^2 = .02$. All other comparisons were non-significant. In order to link this back to the hypotheses, an analysis of the within subject variable (type of relationship: friend or stranger) indicates that the proportion of redundant reproductions was greater for stranger interactions ($M = .04,\ SD = .06$) than for friend interactions ($M = .01,\ SD = .03$).

Specifically considering the respondent data, analyses indicated a significant main effect for redundancies, $F\ (1,140) = 31.51,\ p < .001,\ \eta^2 = .18$. Specifically considering the confederate data, analyses indicated a significant main effect for redundancies, $F(1, 140) = 50.09,\ p < .001,\ \eta^2 = .27$. As well, there was an interaction effect for order and relationship such that those who interacted with a stranger first in a discordant interaction had a higher proportion of redundancies ($M = .07,\ SD = .07$) than those who interacted with a friend first in a discordant interaction ($M = .03,\ SD = .06$), $F(1, 140) = 6.34,\ p < .05,\ \eta^2 = .04$.

Although these results do not support hypothesis one, they are important because the proportion of redundant reproductions is significantly different between friend interactions and stranger interactions, $F\ (1, 287) = 79.12,\ p < .001,\ \eta^2 = .22,$ only the significance is in the opposite direction than originally hypothesized.

*Themes*. The third analysis considered the influence of type of relationship, type of conversation, order of interaction, and conversational role on the proportion of themes included in recall statements. Analyses indicated no main effect for themes. However, there were two interaction effects. There was an interaction effect for order, such that those who interacted with a friend first had a higher proportion of themes in their recall statements ($M = .07,\ SD = .08$) than those who interacted with a stranger first ($M = .02,\ SD = .04$), $F\ (1, 280) = 42.79,\ p < .001,\ \eta^2 = .13$. There was also an interaction effect for interaction type and order, such that those who had a discordant conversation with a friend first had a higher proportion of themes ($M = .07,\ SD = .07$) than those who had a discordant conversation with a stranger first ($M = .01,\ SD = .03$) $F\ (1, 280) = 13.14,\ p < .001,\ \eta^2 = .05$. All other comparisons were non-significant.

In specifically considering respondent data, there was no main effect for themes. However, there was an interaction effect for order such that those who interacted with a friend first had a higher proportion of themes ($M = .07,\ SD = .09$) than those who interacted with a stranger first ($M = .02,\ SD = .03$), $F(1, 140) = 25.15,\ p < .001,\ \eta^2 = .15$. In specifically considering confederate data, there was no main effect for themes. However, there was an interaction effect for order such that those who interacted with a friend first had a higher proportion of themes ($M = .06,\ SD = .06$) than those who interacted with a stranger first ($M = .02,\ SD = .05$), $F(1, 140) = 17.75,\ p < .001,$

$\eta^2 = .11$. There was also an interaction effect for order and interaction type such that those who interacted with a friend first in a discordant conversation had a higher proportion of themes ($M = .07, SD = .07$) than those who interacted with a stranger first in a discordant conversation ($M = .02, SD = .05$), $F(1, 140) = 12.34, p < .01$ $\eta^2 = .08$.

*Evaluations*. The fourth analysis considered the influence of type of relationship, type of conversation, order of interaction, and conversational role on the proportion of evaluations included in recall statements. Analyses indicated no main effects and no interaction effects for evaluations. In specifically considering respondents there was no main effect and no interaction effect for evaluations. As well, in specifically considering confederates there was no main effect and no interaction effect for evaluations.

*Descriptions*. The fifth analysis considered the influence of type of relationship, type of conversation, order of interaction, and conversational role on the proportion of descriptions included in recall statements. Analyses indicated no main effects and no interaction effects for descriptions. However, an analysis of the within subject variable (type of relationship: friend or stranger) indicates that the proportion of descriptions was greater for friends ($M = .05, SD = .10$) than for strangers ($M = .03, SD = .06$), $F(1, 287) = 7.05, p < .01, \eta^2 = .02$.

In specifically considering respondents, there was no main effect and no interaction effects for descriptions. In specifically considering confederate data, there was a significant main effect for descriptions, $F(1, 140) = 5.51, p < .05, \eta^2 = .04$.

*Errors*. The sixth analysis considered the influence of type of relationship, type of conversation, order of interaction, and conversational role on the proportion of errors

included in recall statements. Analyses indicated no main effects and no interaction effect for errors. In specifically considering respondents there was no main effect and no interaction effects for errors. As well, in specifically considering confederates, there was no main effect and no interaction effects for errors.

*Unclassifiables*. The final analysis considered the influence of type of relationship, type of conversation, order of interaction, and conversational role on the proportion of unclassifiables included in recall statements. Analyses indicated no main effects for unclassifiables. However, there was an interaction effect for interaction type, such that those who had a concordant conversation had a higher proportion of unclassifiables ($M = .03, SD = .05$) than those who had a discordant conversation ($M = .02, SD = .04$), $F (1, 280) = 6.29, p < .05, \eta^2 = .02$. All other comparisons were non-significant.

In specifically considering respondents, there was no main effect and no interaction effects for unclassifiables. As well, in considering confederates, there was no main effect for unclassifiables, but there was an interaction effect for interaction type such that those who had a concordant conversation had a higher proportion of unclassifiables ($M = .03, SD = .06$) than those who had a discordant conversation ($M = .02, SD = .04$,. $F(1, 140) = 5.71, p < .05, \eta^2 = .04$.

# CHAPTER 6

## Discussion

This study extends Stafford and Daly's (1984) and Stafford, Burggraf, and Sharkey's (1987) research with conversational memory by examining whether or not the type of conversation, and the type of relationship affect conversational memory. Most research on conversational memory has involved strangers (Stafford & Daly, 1984; Stafford, Burggraf, & Sharkey, 1987; Stafford, Waldron, & Infield, 1989; Benoit, Benoit, & Wilkie, 1995), and those that have considered intimates (Sillars, Weisberg, Burggraf, Zietlow, 1990) have focused more on past relational events rather than specific conversations. This study extends the research by first contrasting conversational memory among individuals in close relationships and stranger relationships. Next I compared both intimates and strangers engaged in a concordant conversation with those engaged in a discordant conversation. A concordant conversation is one in which individuals agree with one another, interact positively, and are able to get along with one another. A discordant conversation is one in which individuals do not agree with one another, are argumentative, and do not get along with one another.

This study addressed two major questions. The first question dealt with whether the type of relationship (friend or stranger) will affect conversational recall. This issue was dealt with in hypothesis one: "Intimates will accurately remember more content of the conversation than strangers." The second issue addressed in this study was whether or not the type of interaction would affect conversational recall. This issue was dealt with in

hypothesis two: "For both intimates and strangers, those involved in a discordant conversation will accurately remember more content of the conversation than those involved in a concordant conversation." Two other factors were also considered. Since each participant had a conversation with both a friend and a stranger, I looked at whether the order of conversation had a significant impact on recall by comparing those who spoke with a friend first and then a stranger with those who spoke with a stranger first and then a friend. As well, I considered the role that each individual played during data collection by comparing the recall of those who were asked to be confederates with those who were simply participants. These two hypotheses and other questions were addressed in a series of repeated measures analyses of variance (ANOVAs).

As mentioned in the results section, it is possible that confederate recall may have been affected by their foreknowledge of conversational objectives. The role of confederate required these participants to focus specifically on creating a certain type of interaction (concordant or discordant). This specific focus may have affected their recall. As well, involvement in the first conversation likely affected recall of the second conversation. When participants realized that the procedure for the second interaction was similar to that of the first, they may have paid more careful attention to the second interaction, expecting to be asked to recall this second conversation as well. Therefore, the cleanest, most valuable data is that of the respondents in the first interaction.

The first analysis considered how much content people recalled from a conversation. My results showed that people recall 14% of a conversation five minutes later. This is a significantly different result from Stafford and Daly's (1984) study, which showed that people recall 10% of a conversation five minutes later. One reason for this

difference is the nature of the conversations. In Stafford and Daly's (1984) study participants were taken to a room and told to "simply talk to each other" (p. 386). Because these participants did not previously know one another, all of the conversations involved "get to know you" information. For the present study, participants were given a specific topic to discuss. All participants talked about campus parking for one interaction and cell phones on campus for the other interaction.[2] A major difference between the present study and that of Stafford and Daly (1984) is that my conversation topics were substantive. It is possible that because my participants had a conversation on a very specific topic, with specific points to discuss, they were able to recall more information than those in the other study. The topic and sub-points themselves may have served as a memory guide for participants.

Hypothesis one, which suggested that friends would remember more content than strangers, was not supported. Conversational recall was measured by the proportion of reproductions found in the recall statements. There was a significant difference between the amount of recall of friends and strangers, but it was in the opposite direction than was originally predicted. In other words, strangers recalled more content of conversations than friends. These findings do not support Stafford and Daly's (1984) reasoning that they found a low percentage of recall for conversations because their participants were not previously acquainted and therefore engaged in small talk, which they defined as a "necessary, but not memorable, social [ritual]" (p. 394). In order to support Stafford and

[2] It is important to mention here that in hindsight the topic of class schedules may have generated more variance than cell phones. Nonetheless, the two topics chosen were sufficient for this study.

Daly's (1984) assumption, friends would have had to recall more content of the conversations than strangers in the present study, but this was not the case. As well, the present results do not support Benoit and Benoit's (1994) findings that people who believe they have a choice regarding future interaction have a poorer memory than those who do not have a choice regarding future interaction. This would suggest that strangers, who may feel they have more of a choice regarding future interaction with a conversational partner, will recall less than friends, who may not feel they have a choice in future interaction.

There are a few possible explanations for why strangers would recall a higher proportion of reproductions from the conversation than friends. Strangers may have greater recall because they only have one conversation to store in memory. Close friends have had many past interactions and experiences with one another. It is possible that their previous knowledge of one another and expectations of one another distract them from focusing on the current conversational issue.

As well, a variation of Stafford and Daly's (1984) familiarity effect may also explain why strangers recalled more of the conversation than friends. In trying to explain why participants recalled more of a partner's contributions than their own, Stafford and Daly (1984) suggested that familiarity with one's own thoughts and statements in an interaction may instill a feeling that these thoughts are not as important to remember or report as the less familiar stranger's statements. Stafford and Daly (1984) suggest that, "the uncertainty attached to a stranger may arouse interest and consequently greater attention" (p. 396). A similar reasoning can be applied to the current study. It is likely that friends were already familiar with one another, and familiar with their partner's

interaction patterns and statements. It makes sense that friends would not pay as much attention to details, statements, and interaction patterns when they are already familiar with the other. It may not be "as important to store or report" familiar information (Stafford, Burggraf & Sharkey, 1987). Strangers, however, are not familiar with one another, and perhaps when participants interacted with a stranger they attended more readily to the interaction and conversation. As well, strangers may have reported more reproductions from their interaction than friends because the interaction was new, different and unfamiliar.

Results also indicated that strangers recalled a higher number of redundancies than friends. This is understandable considering strangers recalled more reproductions than friends. As strangers are recalling more information, it makes sense that they may repeat themselves more often than friends. The more information that is recalled, the harder it may become to double check oneself and determine if information was already reported.

So, while strangers recalled more reproductions and redundancies, friends recalled more themes. Themes were summary statements of the conversation, not directly related to any particular idea unit. It seems as if the strangers were more focused on the actual content of the conversation, and reproducing that content, while friends focused on more broad and general information. This coincides with Stafford, Burggraf and Sharkey's (1987) findings, which supported that "participants' goals in conversations may be of the nature of forming impressions for future interaction than the remembrance of content" (p. 223). But why would strangers be more focused on content and friends more focused on impressions? It may be that the familiarity effect mentioned earlier

plays another role here. If friends are accustomed to interacting with one another, and perhaps have even had a conversation on this topic before, they may focus more attention on how they are interacting with one another and what their environment is like. For strangers everything is new, and their focus is on the content of what is being said. Perhaps the stranger is more focused on who this other person is, and what they are trying to say, than a friend would be.

These data are fairly consistent with expectations from a social cognition perspective. Individuals interacting with a stranger are more likely to process bottom-up, while individuals interacting with a friend are more likely to process top-down (Fiske & Taylor, 1991). Bottom-up processing leads individuals to focus on specific, concrete information. These memories "more often consist of relatively isolated single experiences" (Fiske & Taylor, 1991, p. 321). Strangers in my study only had one interaction with one another from which to draw information, therefore it is understandable that they would recall more actual details from the conversation. Top-down processing leads individuals to focus on abstract, general information. These memories are "often embedded in an elaborate network" (Fiske & Taylor, 1991, p.321). Close friends have had many interactions with one another, therefore it is understandable that they would recall more themes. Results from Park's (1986) study suggested that as individuals become more familiar with one another their impressions of the other become more abstract. In Park's (1986) study, individuals who had just recently become acquainted wrote open-ended descriptions of one another. They did this once a week for seven weeks, and as time progressed the participants focused more on traits and less on behaviors in describing one another. This suggests that as individuals get to know one

another and become more familiar with one another they rely more on abstract information than on concrete information in describing one another. This is consistent with my own results, in which I found that strangers recall more exact data and friends recall more themes. From this point of view it may be surprising that themes were not recalled even more, or in a higher proportion, than they were. One explanation for the lack of a higher proportion of themes being recalled is the topic of conversation. In my study participants engaged in a substantive conversation with specific discussion points, as opposed to a "get to know you" conversation. It is possible that the specificity of the topic enabled participants to recall more exact information than they would have in a general "get to know you" interaction.

Hypothesis two, which suggested that for both intimates and strangers participants would remember more if they were involved in a discordant conversation than if they were involved in a concordant conversation, was not supported. There appears to be no significant difference in recall between those engaged in a concordant interaction and those engaged in a discordant interaction. This contradicts previous research which suggests that people have better recall of information that is unusual, or incongruent with one's expectations rather than congruent information (Hastie & Kumar, 1979; Srull, 1981; O'Sullivan & Durso, 1984; Hastie, 1984; Waddill & McDaniel, 1998).

A manipulation check showed that the impressions of one's partner were lower after a discordant interaction than a concordant interaction. This means that those in the discordant interaction were indeed more difficult to talk to, more difficult to get along with, less friendly, more hostile, more argumentative, and less enjoyable to talk to than those in the concordant interaction. The manipulation check also indicated that there was

a significant difference between the means of concordant interactants and the means of discordant interactants on four measures: "My partner's behavior was appropriate," "My partner's behavior was unusual," "My partner engaged in normal conversational behavior," and "The conversation was not what I expected." A significant difference on these measures would imply that the discordant conversations were not what participants expected, as compared to the concordant conversations. Although lower means for impressions and expectations might suggest that the discordant interaction deviated from one's expectations more so than the concordant interaction, previous research findings suggesting that people tend to remember conversations that deviate from their expectations (Bower et. al, 1979; Kellerman, 1995) were not supported.

One possible explanation is that the discordant conversations were not different enough from the concordant conversations. Because participants were asked to work with us as confederates, and they were the ones creating the specific type of interaction, it was hard to control for whether or not each interaction was concordant or discordant. Many confederates expressed concern during data collection that they were having a hard time being discordant without laughing or somehow giving away the fact that they were confederates. As well, once a confederate disagreed with her partner, the participant often changed her mind and began agreeing with the confederate, thus decreasing the discordance.

Several other comparisons were made, resulting in a number of interaction effects. There was an interaction effect for order, such that those who interacted with a stranger first, had a higher proportion of reproductions in their recall statements than those who interacted with a friend first. Results also showed that strangers had a higher

proportion of reproductions than friends. With this in mind, it is understandable that those who interacted with a stranger first may report more reproductions than those who interacted with a friend first. If participants were fatigued by the time they got to the recall stage of their second interaction, they may not have written as much or been as careful to write down the details as they were in the first interaction. Based on this fatigue, those who interacted with a stranger second would not recall as much as those who interacted with a stranger first, because although strangers recalled proportionately more reproductions than friends, by the second interaction they were tired and less likely to report the conversation in the same detail.

There was an interaction effect for order, such that those who interacted with a friend first had a higher proportion of themes in their recall statements than those who interacted with a stranger first. These results are in line with previous research demonstrating a high proportion of themes in recall statements. Stafford and Daly (1984) found that after reproductions, the next largest proportion of recall material was in the theme category. Based upon the present study it appears that strangers were more focused on preserving the gist of the original conversation, and used verbatim or paraphrased language that reflected idea units that actually occurred in the conversation (reproductions). Friends were more focused on summary statements of the conversation, mentioning a topic discussed, but not offering any specific information about that topic. It may be that because strangers had never interacted with one another before, they were able to focus solely on this one five minute interaction. Friends on the other hand have had many experiences with one another, and perhaps previous impressions and

conversations lead them to use more general themes rather than specific reproductions of the conversation.

*Limitations*

Although the coding of data was done with great care, one limitation to this study did occur with the coding process. An ideal situation would involve the use of one coder to code one hundred percent of the data, and a second coder to code at least twenty percent of the data, therefore allowing me to check for intercoder reliability. While I did have a second coder doing twenty percent of the coding, time restrictions kept me from using the first coder to code one hundred percent. Coder 1 coded eighty percent of the data, and coder 2 coded twenty percent of that same data to check for intercoder reliability, as well as an additional twenty percent that coder 1 did not complete. The limitation that can occur in this case is that coder drift may become evident over time. Although Cohen's K for coder agreement was acceptable (K = .74), it is still better to have one coder coding one hundred percent of the data.

Perhaps a related limitation was low intercoder reliability on the category of unclassifiables. The coders did not seem to consistently agree upon what should be labeled as unclassifiable. This category was only to be used for information that did not fit in any other category. Some possible examples of this category might be comments such as, "That's all I can remember," or "I have run out of time." One way to avoid this problem in the future would be to engage the coders in longer training sessions and more practice coding sessions before they actually begin to code the data. The current study involved one three hour training session and two practice coding sessions. It would also be beneficial to regularly check on the coders during the coding process to detect any

discrepancies early on. Coded material was checked twice during the early stages of coding to detect discrepancies.

As well, I allowed participants to self define "close relationships." In other words, when I asked participants to bring a close friend to the study, I did not detail what I considered to be a close friend. Since individuals may have different definitions of a close friend, some people may have brought a roommate whom they had only known for a few months and others may have brought a best friend whom they grew up with and had known for most of their lives. I only divided individuals into two categories: stranger or close friend. In the future it may be helpful and interesting to distinguish degrees of friendship.

When participants arrived at the study, I chose one person from each dyad to work with me as a confederate. That person was instructed on how to interact with their partner and whether to create a concordant or discordant interaction. This method ensured that each participant was communicating with both a friend and stranger, however new problems arise when there is a different confederate for each new interaction. Some people may be better at role-playing, and therefore easily create the desired interaction. Others may have a more difficult time, and their interactions may be unnatural. It is also possible that some conversations were more discordant than others, depending on how argumentative the individual confederate was.

*Directions for Future Research*

This study promotes many new directions for future research in the realm of conversational memory. The present study considered only females in the research. It would be interesting and important to consider males in the future, especially considering

several previous studies that have found differences in memory detail and vividness of memory between women and men (Harvey, Flanary & Morgan, 1986; Ross & Holmberg, 1990; Ross & Holmberg, 1992). The aforementioned studies have considered differences regarding memory of past relational events, so additional research could help us to determine if differences also exist between the conversational memories of women and the conversational memories of men.

There also may be individual factors and characteristics that affect one's memory for conversations. Considering such individual influences as attachment style and cognitive complexity may offer additional understanding regarding conversational memory.

When considering conversational memory among close friends or intimates it may also be helpful to consider relational satisfaction. Holmberg and Veroff (1996) observed that how a person views a relationship at the present time can affect past memories either positively or negatively. Therefore it would be conceivable that one's level of satisfaction within a particular relationship could also affect one's memory of conversations, and perhaps cause an individual to remember things with a more positive or more negative slant.

As well, Crano (1977) observed strong primacy effects with trivial topics and recency effects with topics of high relevance. It would be interesting to consider the implications this might have on conversational memory. Perhaps which part of a conversation one actually remembers is influenced by whether the topic seems trivial or relevant to the individual.

In summary, such instances as forgotten conversations or differing conversational memories may eventually lead to relational problems. Inaccurate memory can be a form and cause of miscommunication. Miscommunication generally leads to negative outcomes in a close relationship. It can cause conflict, a decrease in relational satisfaction, and distance between relational partners. One danger of miscommunication is that over time a person may build up a bank of memories of feeling misunderstood, which may become more easily accessible as volume increases and therefore affect future perceptions and attitudes toward the relationship and relational partner (Sanford, 1998). According to Sanford (1998, p. 491), "a person who believes he or she is stuck with a partner who continually fails to validate and understand important, personal relationship concerns and intimate feelings may become less satisfied in the relationship, less hopeful of future happiness, and lose interest in giving and receiving affection." Miscommunication can lead to the deterioration of a close personal relationship.

One possible source of miscommunication between relational partners is that they have a conversation and then remember it differently. It may be that they remember the wording of the conversation differently, they may remember the location or context differently, or even have different recollections of who said what. The current study suggests that there are factors affecting the amount and type of information recalled. It appears that the type of relationship one has with another individual (friend or stranger) may affect one's recall of a conversation. Strangers recalled a higher proportion of reproductions and redundancies than did friends. Friends, however, recalled a higher proportion of descriptions than did strangers. There does not appear to be a difference in amount of recall based upon the type of conversation (concordant or discordant). There

were no significant differences in the amount of recall by those engaged in a concordant interaction and the amount of recall by those engaged in a discordant interaction.

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Appendix 1
Pre-Conversation Expectancy Measures

The following questions ask you about the conversation you will have with your partner. For each question, please circle the number that best reflects your opinion.

1. I expect my partner to be easy to talk to.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

2. I expect my partner to be difficult to talk to.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

3. I expect my partner to be easy to get along with.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

4. I expect my partner to be difficult to get along with

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

5. I expect my partner to be friendly.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

6. I expect my partner to be hostile.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

7. I expect my partner to be argumentative.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

8. I expect my partner to be kind.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

9. I expect my partner to be rude.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

10. I expect to enjoy talking to my partner.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

11. I expect to get along with my partner.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

12. I expect to argue with my partner.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

Appendix 2
Post-Conversation Expectancy Measures for Friend Interaction

The following questions ask you about the conversation you had. For each question, please circle the number that best reflects your opinion.

1. My partner was easy to talk to.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

2. My partner was difficult to talk to.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

3. My partner was easy to get along with.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

4. My partner was difficult to get along with.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

5. My partner was friendly.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

6. My partner was hostile.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

7. My partner was argumentative.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

8. My partner was kind.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

9. My partner was rude.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

10. I enjoyed talking to my partner.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

11. I got along with my partner.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

12. I argued with my partner.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

13. My partner behaved the way I expect most people to behave.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

14. My partner's behavior was appropriate.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

15. My partner's behavior was unusual.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

16. My partner engaged in normal conversational behavior.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

17. The conversation was not what I expected.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

Appendix 3
Post-Conversation Expectancy Measures For Stranger Interaction

The following questions ask you about the conversation you had. For each question, please circle the number that best reflects your opinion.

1. My partner was easy to talk to.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

2. My partner was difficult to talk to.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

3. My partner was easy to get along with.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

4. My partner was difficult to get along with.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

5. My partner was friendly.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

6. My partner was hostile.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

7. My partner was argumentative.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

8. My partner was kind.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

9. My partner was rude.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

10. I enjoyed talking to my partner.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

11. I got along with my partner.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

12. I argued with my partner.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

13. My partner behaved the way I expect most people to behave.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

14. My partner's behavior was appropriate.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

15. My partner's behavior was unusual.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

16. My partner engaged in normal conversational behavior.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

17. The conversation was not what I expected.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

18. The person I talked to was a stranger.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

19. I have never interacted with this person before today.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

20. I have never talked to this person before today.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| strongly disagree | disagree | neutral | agree | strongly agree |

**If you had any previous interaction with the individual you just had a conversation with before meeting her in this study today please explain how you know her and the specific nature of any past interaction.

_____
_____
_____
_____
_____
_____

Appendix 4
Guidelines for Coding Conversations and Recall Paragraphs

Idea Units

The first step is to read the transcribed conversation and divide it into idea units. Idea units will be separated with a slash mark. An idea unit is "the smallest unit of meaning that has informational or affective value." For example, "my name is Sarah," "communication is my major" and "campus parking is a problem" can all be considered idea units. The following sentence: "Because you lived in Brumby last year I assumed you were an RA in Brumby" can be divided into two idea units, the first being "because you lived in Brumby last year" and the second being "I assumed you were an RA in Brumby."

As you are dividing the conversation into idea units, number each idea unit sequentially. A small number can be written directly above each unit. The first several conversations should be coded in pencil until coders are comfortable with the coding. The coder should not fill in incomplete sentences or add implied statements. If there is an incomplete idea unit, label it as a fragment (Fr). You will number the fragments sequentially, but separately from the idea units. Do not simply delete fragments at this point because they may have potential value to the conversation partners. For example,
A: Is parking a problem?
B: I don' t know
A: well, its just
B: I guess it is

In the above conversation person A' s first statement would be labeled 1 (for idea unit 1), person B' s first statement would be labeled 2 (for idea unit 2), A' s second statement would be labeled Fr 1 (for fragment 1) and B' s second statement would be labeled 3 (for idea unit 3).

Be aware that idea units may be embedded in other idea units. In the sentence "I' m going home to see my parents" there are two idea units that should be labeled sequentially. "I' m going home" is one idea unit, and "to see my parents" is another.

You may also find that there are redundancies within a conversation. All redundancies made by the same person are counted as one idea unit. For example if one individual states, "Today is such a nice day" and then later in the conversation the same person again says, "Today is a really pretty day" then these would only be counted as one idea unit. Because the gist of the two statements is the same and it is coming from the same person we only count the idea unit once. In this case the second statement would not be numbered, rather label it as a redundancy using the code (red.). However, if one partner

is redundant with another partner then the redundancy is coded as a separate idea unit. In other words, if person A states that "Today is such a nice day" and person B later also states, "Today is a really pretty day," the statements would be labeled as two different idea units. "An exception to this occurs when the redundancy is simply a back-channel response. Such responses are deleted" (Stafford, 1982, p. 99).

A back-channel response, or filler language, such as "uh huh" will be ignored and not counted as a separate idea unit. Words such as "yeah" and "right" may mean to different things. They could be an answer to a direct question such as "do you park on campus?" followed by the answer "yeah" or "you have a cell phone, right?" followed by the answer "right". In these cases such responses should be coded. However, these terms are also frequently used as filler language to let the speaker know that one is listening. In this case the terms should not be coded as separate idea units. The coder must use his/her own discretion in determining whether or not to code such language.

You may find that conversants often interrupt one another. If one person' s idea unit is interrupted then place a number over the first half of the idea unit and repeat the number over the second half of the idea unit. If one idea unit is embedded in the middle of another idea unit then repeat the number over both parts of the idea unit.

If a response makes sense in a sentence form and can be considered to have informational or affective value it should be coded as an idea unit. For example, if one individual says "I' m from Buckhead" and the other person responds with "cool", then "cool" would be coded as an idea unit because it is understood to mean "it is cool that you are from Buckhead".

If you are in doubt regarding whether information is one or two idea units, then allow your intuition to guide you. The coder must ask him or herself "would it be possible for a part of this information to be remembered without the other part?" If so then code the information as two separate idea units.

If at any time you have questions you should ask Laura Humphreys for assistance.

After breaking a conversation into idea units the total number of idea units should be tallied and written at the end of the conversation in the right hand margin with a circle around the number.

Each conversation and its corresponding recall paragraphs should be coded during the same session.

Recall Paragraphs

Once the transcribed conversation has been broken into idea units and the number of idea units have been tallied you will begin work with the recall paragraphs. The recall paragraphs must also be broken into idea units, this time known as recall units because they are a part of recalled information. "Recall units are any memory of, any implication

from, any description, any evaluation, or any elaboration of the conversation, the conversants, or the experience." Again the recall paragraphs will be broken into recall units using a slash mark to separate recall units. Do not count the phrase "she said" or "I said" as an individual recall unit. This is not part of recalled information. However, if a person writes something like "I think she said" or "she said in a joking manner" then count this as a recall unit because it offers additional information. The phrase "I think she said" could be taken to mean "I don' t remember for sure". This type of information would be coded as unclassifiable.

The recall paragraphs will be compared with the original transcripts. Be aware that participant **A and B are friends**, and **C and D are friends**. Likewise, **A and D are strangers** and **B and C are strangers**. Be sure to match the recalls with the correct transcripts. Everything should be labeled, but if at anytime you have a question please contact the researcher.

Recall units will be broken into several categories, with the appropriate abbreviation written above the recall unit. Each recall unit will be numbered sequentially, similar to the way in which the idea units were numbered. A form will be attached to the back of each recall paragraph on which you will tally the number of recall units in each category. Recall units may be divided into the following categories as defined by Stafford (1982):

1. Reproductions (Rep): Recall units that preserve the gist of the original idea units. These may be verbatim or paraphrases. These recall units accurately reflect idea units that actually occurred in the conversation. Examples may include statements such as: "she said she was a freshman," "she is from Roswell," "she lives in the dorm," "she is mad that she can' t park at Ramsey until after 5:00pm."

2. Redundant Reproductions (RR): The participant repeats a reproduction. In this case the person restates a previously stated reproduction. If at the beginning of the recall paragraph the individual says, "she parks in the North Deck," and then again later in the paragraph she again states, "she parks in the North Deck," the first statement will be labeled as a reproduction and the second statement will be labeled as a redundant reproduction.

3. Themes (T): Summary statements of the conversation that are not directly related to any one idea unit. These statements mention a topic discussed with no specific information about that topic. For example, themes that may appear in the recall are, "we talked about parking," "we talked about cell phones," "we talked about campus issues," "we talked about our majors."

4. Elaborations (el): Details not explicitly mentioned in the conversation, but that are plausible and could have been said. These inferences were not specifically stated, but could have been and are consistent with the flow of conversation. For example, if an individual states in original conversation "my husband parks at Ramsey" and in the recall paragraph her partner says, "she said she was married" this would be labeled as an elaboration. In the original conversation the person may not have explicitly stated that

she was married, but because she mentioned a husband, the partner can infer that she is married. Often participants will elaborate on what they think they told their partner. For example, a person may say "I' m from Florida" and in her recall state "I told her I was from Jacksonville, Florida." In the recall statement "Jacksonville" would be coded as an elaboration and "Florida" would be coded as a reproduction.

5. Descriptions (d): Remarks about any aspect of the conversational interaction. This recall unit is intended to give a mental picture of the situation with no positive or negative bias attached. The participant may describe things about her partner, her own role in the conversation, the partner' s role in the conversation, or the experimental setting. Descriptions are impressions of the interaction not tied to any specific idea unit. Examples of descriptions are: "she was wearing a black shirt," "she had a water bottle with her," "she asked most of the questions," "she looked down at the sheet when she talked," "we agreed on most things," "there are four cameras in this room."

6. Evaluations (ev): An expression of a positive or negative bias. This is a judgment that is subjective and makes conclusion that all people may not reach. An evaluation can be made regarding the other person in the interaction, what the other person said, the conversation itself, or the experimental setting. Examples of evaluations are: "she was really rude," "she was pretty," "she seemed distracted," "she was very assertive with her opinions," "this is a stupid experiment," "our conversation was boring," "we didn' t really have much to say."

7. Errors (Er): Incorrect recall of one or more idea units. This is information that is incorrect or never occurred (not to be confused with plausible information as found in elaborations). If in the original conversation one partner says, "I am a business major" and in the recall her partner states, "she is a communications major" this would be an error. If one person originally says she is from Atlanta and her partner recalls that she is from Augusta, this is an error.

8. Unclassifiables (Unc): Anything that cannot be classified in one of the above categories. This is information that cannot go anywhere else. This information should not be about the conversation or the conversational interactants. Examples of this category include statements such as: "That' s all I can remember," or "I have run out of time." Once the recall paragraph has been coded according to specific category, fill out the recall form and attach it to the back of the paragraph. The form asks that you tally the number of total recall units in the paragraph and the number of recall units in each category. If at any time you have a question about how to categorize a unit ask Laura.

Sample Conversation:

A: Hey, I' m Sara
B: I' m Lynn
A: So are you a communications major?
B: No I' m actually an accounting major. I just came here with my friend.
A: So do you think that cell phones cause a problem in the classroom?

B: Well, sometimes. I think that if the ringer is really loud then it can be distracting.
A: Do you have a cell phone?
B: Yeah, but I don' t usually bring it to class
A: Well do you think that students should lose points for having their cell phone ring in class?
B: No way! I mean, what if it rings by accident or something? That doesn' t really seem fair.

A' s Sample Recall:

(Rep) (Er) (T)
She said her name was Lynn. She was a business major. We talked about cell phones.
(el)
She thinks that losing points for having a cell phone ring in class is too extreme.
(ev) (d) (RR)
She seemed like a pretty cool girl. She had on a blue GAP t-shirt. Her name was Lynn.
(Unc)
That' s about it.