UNIVERSITY OF CALIFORNIA

SANTA CRUZ

MEANING-MAKING AND FUNCTIONS OF MEMORY TELLING IN LATE ADOLESCENTS' SELF-DEFINING MEMORY NARRATIVES

A dissertation submitted in partial satisfaction of the requirements for the degree of DOCTOR OF PHILOSOPHY

in

PSYCHOLOGY

by

Kate C. McLean

March 2004

The Dissertation of Kate C. McLean

is approved:

Professor Avril Thorne, Chair

Professor Märgarita Azmitia

Professor Mara Mather

Robert C. Miller

Vice Chancellor for Research and

Dean of Graduate Studies

UMI Number: 3127398

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.



UMI Microform 3127398

Copyright 2004 by ProQuest Information and Learning Company.

All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company 300 North Zeeb Road P.O. Box 1346 Ann Arbor, MI 48106-1346 Copyright © by

Kate C. McLean

2004

Table of Contents

List of Tables	V
List of Figures	vi
Abstract	vii
Dedication	İX
Acknowledgements	X
Introduction	1
Method: Study 1	13
Results: Study 1	16
Method: Study 2	16
Results: Study 2	18
Discussion	27
Endnotes	42
References	43
Table 1	47
Table 2	48
Table 3	49
Figure 1	50
Figure 2	51
Figure 3	52
Figure 4	53
Figure 5	54

Appendix A 55

List of Tables

Table 1. Narrative Examples of Lessons and Insights	47
Table 2. Means and Standard Deviations of Relevant Variables	48
Table 3. Topics of Self-explanation and Entertainment Memories	49

List of Figures

Figure 1. Frequencies of each telling function.	50
Figure 2. Frequency of lessons, insights, and no meaning in memories told for self-explanation.	51
Figure 3. Frequency of lessons, insights, and no meaning in memories told for entertainment.	52
Figure 4. Frequency of insights and lessons in memories told for self-explanation and for entertainment.	53
Figure 5. Frequency of Telling Functions and Audience Role.	54

Meaning-making and Functions of Memory Telling in Late Adolescents' Selfdefining Memory Narratives

Kate C. McLean

Autobiographical memory telling is a growing area of research that has important theoretical implications for the study of identity development, yet empirical attempts to connect aspects of memory telling contexts to identitymaking are rare. Therefore, this study examined the relationship between an important feature of memory telling contexts, the functions of memory telling. and an important feature of identity development, the personal meaning made of past experiences in late adolescent's self-defining memory narratives. Importantly, this study is one of the first to take a narrative approach to the study of memory telling functions. Narratives of self-defining memories and episodes of having told those memories to others were collected from 185 late adolescents. Narratives were coded for personal meaning (lessons or insights). In Study 1, the prevalence of different functions of telling self-defining memories was examined. In Study 2, the prevalence of personal meaning in the two most common functions, telling to explain the self and to entertain others, were examined along with to whom memories were told and the number of people to whom memories were told for those functions. Meaning was infrequently reported for the two most common functions, but this was particularly so for the entertainment function in comparison to the selfexplanation function. Insights were more common than were lessons in telling

for self-explanation. Peers were more likely to be the recipients of self-explanation stories than of entertainment stories, and there was no difference in the use of functions when family was the audience. The number of people to whom memories were told for the entertainment and self-explanation functions differed depending on sub-samples used. Discussion will focus on the importance of looking at the functions of memory telling in social contexts and, more broadly, on how memory telling serves to communicate important, but different, aspects of identity.

Dedication

This dissertation is dedicated to Ariel Cohen Lalezari. Throughout the proposal, data collection, and writing of this dissertation, Ariel's beginning life story reminded me of what was important in life and what experiences deserve narrative reflection. I look forward to the meaning that Ariel will make of her unique life.

Acknowledgements

I would first like to acknowledge, Avril Thorne, who has been a mentor of masterful wisdom, encouragement, and intellectual energy. I cannot imagine a more wonderful and stimulating relationship for a student and I feel incredibly lucky to have been guided by her. I value her ideas, her humor, and her friendship, which I hope will continue to blossom.

I would also like to thank my dissertation committee, Avril Thorne, Margarita Azmitia, and Mara Mather, who have tolerated my absence during the coding, analyses, and writing of this dissertation. Their questions and comments in the proposal defense and on an earlier draft of this dissertation have made the dissertation stronger and more coherent. Margarita Azmitia has also extended her research and her lab to me so that I was able to expand my interests and knowledge into new areas. I am grateful for her generosity and support.

My research assistants, Stefan Esposito, Natasha Molony, Danny

Ambrose, Brooke Hollister, and Yasmine Verdugo were invaluable in this

process. Their help with data collection, data entry, and transcription was

crucial. Stefan Esposito and Natasha Molony also completed careful reliability

coding of the narratives for which I am most appreciative.

I would also like to recognize Carol George who was my undergraduate advisor and my first academic inspiration. She is still serving as an invaluable

mentor and has also become a true friend. It is unusual to sustain a mentoring relationship from so early on and I am grateful for her continued interest in and dedication to my intellectual development.

The entire Department of Psychology at the University of California, Santa Cruz, including staff, faculty, graduate students, and especially my cohort, are also due an acknowledgement for the wonderful support they have given me. I would especially like to thank Janette Crutch for helping to get things organized in order to finish my degree while 3,000 miles away.

My family and friends have been hugely supportive of my academic endeavors. In particular, Ashley Dixon was the first person to open my eyes to the study of Psychology, for which I am most appreciative. Karen Cohen is a spectacular person who reminds me to trust my instincts, to do the right thing, and to have a glass of wine. My parents and extended family have provided incredible love and support and, importantly, have provided the many opportunities for me to discover my interests and to pursue them.

Finally, Lewis Jones has been an unfailing and constant source of encouragement and support. Most significant to me, he has engaged in conversations about some of the most fundamental aspects of my work, like "what is identity," and those conversations have helped me to think more deeply about what it means to tell the story of one's life, and what it is to make meaning

of one's life. To know someone, inside or outside of the field, who will engage in those kinds of discussions is a true gift that will help to sustain my passion and love for the study of Psychology, and for the study of people's lives. Meaning-making and Functions of Memory Telling in Late Adolescents' Selfdefining Memory Narratives

Identity development is one of the major psychosocial tasks of late adolescence and has important implications for healthy psychological development throughout the life course. McAdams (1993; 2001) proposed that identity is a life story, which begins to be formed in late adolescence. One of the guiding principles of the life story theory of identity is that life stories serve to make sense of one's past, present, and anticipated future and are partly constructed by *making meaning* of past experience. One way that narrative construction and meaning-making occurs is when memories are told to others (Pasupathi, 2001; Thorne, 2000; Thorne, McLean, & Lawrence, in press), and a recent push to situate identity in the contexts in which it is formed calls for examining specific contexts as well as individual intentions in story-making (see Thorne, 2000; in press). This study focused on the context and functions of memory telling by examining the frequency of personal meaning in late adolescents' self-defining memory narratives in order to understand when meaning is and is not used to communicate identity.

Meaning-making and Identity Development

McAdams (2001) proposed that the life story serves to integrate different aspects of identity such as differences between one's past, present, and future self.

An important way that integration occurs is through reflecting on and interpreting past experiences, which is here termed *meaning-making*. Making personal meaning of autobiographical memories has been one of the main emphases of studies focused

on identity from a narrative perspective, and is defined as reflecting on the personal significance of a past event to one's current understanding of self, relationships, or the world at large. Recent reviews and research findings have pointed to making meaning of momentous events as an identity transforming and defining process (Habermas & Bluck, 2000; McAdams, 1988; McLean & Thorne, 2003; Singer & Bluck, 2001).

Meaning-making is a kind of *causal coherence* that emerges as late adolescents begin to think about constructing their life stories (Habermas & Bluck, 2000). Causal coherence involves constructing stories to explain how a past event led to or influenced another event or aspect of the self. For example, recalling one's experience with parental divorce at age 10 may lead one to see how that experience caused one's current wariness of relationships, and reflection on that experience may prompt one to transform one's ideas about relationships.

While the construction of identity and the life story are life long processes (Erikson, 1968; Harter, 1999; Kroger, 2000; McAdams, 1988), there are different points in the lifespan when identity work may be heightened. The life story begins to emerge in adolescence due to the onset of formal operations, physiological maturity, and in many communities, the demands for establishing oneself in the world through work, school, and family. Those requirements tend to require or allow for reflecting on who one is by making meaning of past experience (Grotevant, 1993; Habermas & Bluck, 2000; McAdams, 2001). Further, the abundance of personal memories in late adolescence (Rubin, Rahhal, & Poon, 1998)

may require heightened meaning-making in the form of integration to understand the multitude of experiences that come to define the self.

The participants in this study were undergoing the major transition of beginning college, a context that puts special demands on identity-making. During life transitions and disruptive experiences cognitive demands are higher to make sense of new or unfamiliar experiences (Azmitia, 2002; Piaget, 1965; Surra & Bohman, 1991). Meaning-making and identity work may be heightened during the transition to college as adolescents must not only integrate their new surroundings, but also communicate who they are in their new environment.

Self-defining memories were chosen as the narrative unit of analysis for this study because these experiences are by definition central to one's sense of self. Further, self-defining memories have been implicated as an important kind of memory to study in adolescence because they are memories that become fodder for constructing identity as a life story (Blagov & Singer, in press; Singer & Salovey, 1993; Thorne, 2000). Blagov & Singer (in press) also suggested that emotional and vivid memories, such as self-defining memories, are likely candidates for meaning-making (see also Singer & Salovey, 1993). Therefore, self-defining memories were examined in this study because of their critical relationship to identity and to the narrative work of meaning-making.

Consistent with Erikson's (1968) theory of identity, a recent study found that late adolescents who were found to report meaning in their self-defining memories were at higher stages of ego development than those who did not report meaning

(McLean, 2004). The latter study drew on work by McLean and Thorne (2003) who defined two specific kinds of meaning in late adolescent's self-defining memory narratives: lesson learning and gaining insight (see also McCabe, Capron, & Peterson, 1991; Pratt, Norris, Arnold, & Filyer, 1999; Thorne et al., in press). Lesson learning refers to learning a specific lesson from an event that could direct future behavior in similar situations (e.g., "I shouldn't talk back to my mother"). Gaining insight refers to gleaning meaning from an event that applies to greater areas of life than a specific behavior; with insight, there is often some kind of transformation in the understanding of oneself or others (e.g., "I realized that I was an independent person"). Insights are reflections into personhood or relationships, whereas lessons remain at the level of behavior.

Research with older adults further suggests that searching for and discovering meaning has important implications for social and emotional development. In terms of mental health, Baerger and McAdams (1999) found that nondepressed middle-aged adults (35-65 years) were more likely to have coherent life stories than were depressed individuals. Similar to meaning-making, one aspect of coherence that Baerger and McAdams (1999) measured was whether narratives related the details of an event to larger themes in one's life. The ability to reflect on past experiences may also have important implications for coping with challenging experiences. For example, Pals (under review) found that middle-aged women who reflected on the impact of a personally difficult life event and who then resolved the event showed better psychological and physical health nine years after the narrative

report of the difficult event than did those women who did not engage in such reflection (see also King 2001; King, Scollon, Ramsey, & Williams, 2000). Finally, because meaning-making is important to constructing a coherent life story, lack of meaning-making may compromise identity development. Thus, meaning-making is not only an intellectual exercise, but it also has important implications for the development of identity and for mental health.

Interestingly, while meaning-making appears to be an important process in constructing a healthy and coherent sense of self, research on late adolescent's self-defining memory narratives has shown that spontaneously reported meanings, both lessons and insights, are relatively rare (McLean & Thorne, 2003; Thorne et al., in press). When these kinds of meanings are found, they are more likely to be reported in narratives about conflictual than nonconflictual past events (McLean & Thorne, 2003; Thorne et al., in press). Further, listeners tend to respond negatively to lessons and positively to insights (Thorne et al., in press). The findings about conflict are informative regarding the kinds of memories from which meaning is made and the findings about listener responses are informative about which kinds of stories are better appreciated by listeners. Yet, none of these findings clarify when meaning is or is not used to define the self to others. Because meaning is sparingly reported in late adolescent's memory narratives, meaning may only be useful or appropriate in some contexts and not at all in others.

In an attempt to fill the gap in research on when meaning is important to defining the self to others, this study investigated the presence of meaning for

different functions of memory telling. Two functions were examined that were expected to be associated with differing degrees of meaning, telling for entertainment and telling for self-explanation. The research on memory telling functions will now be discussed to develop the rationale for studying functions, and specifically for studying the functions of self-explanation and entertainment.

Functions of Personal Memory Telling

An important and broad function of telling memories to others is to construct and confirm identity with others. Thorne (2000) proposed that for late adolescents and emerging adults, in particular, memory telling serves to proffer personal information to construct a personal identity. Thorne (2000) suggested that the high frequency of memorable experiences occurring during late adolescence (Rubin et al., 1998) coupled with the search for identity results in those experiences being told in the service of identity development. As evidence that late adolescents are indeed engaging in the practice of memory telling, Thorne et al. (in press) found that late adolescents reported telling about 90% of their self-defining memories at some point in the past (see also Rimé, Mesquita, Philippot, & Boca, 1991).

While memory telling may be particularly important to identity development in adolescence, memory telling begins in early childhood. Developmental theories of autobiographical memory and self are based on the idea that an important function of conversations about the past is for children to learn to construct personal narratives so that they begin to develop a sense of self (Nelson & Fivush, 2000; Snow, 1990). A number of studies have found that such conversations are important

for later recollections and narrative constructions of past events (e.g., Farrant & Reese, 2000; Kuebli & Fivush, 1992). Extending the study of memory telling to adolescents and adults, descriptive research has shown that past events are told frequently and soon after the events occur, and this is particularly so for highly emotional events, suggesting that memory telling serves to help one work through the meaning of emotional events (Rimé et al., 1991).

Pillemer (1992) is one of the first memory researchers to propose an empirical paradigm for studying the functions of autobiographical memory. Pillemer proposed several functions of autobiographical memories, distinguishing between private or personal functions (e.g., reflecting on a past event in private to better understand oneself) and social functions (e.g., developing intimacy or self-understanding through memory telling) (see also Webster, 2003). However, Nelson (2003) suggested that while memory can be viewed as an individual phenomenon, narrative, the manner in which memories are stored and communicated, is a social phenomenon (see also Bruner, 1990). Thus, Nelson (2003) argued that the personal and social functions of autobiographical memory are essentially interconnected. In studying the telling of self-defining memories, in particular, it is premised that the self and social functions are linked because telling can have important implications for self development and memories thought to be in the realm of the self can become fodder for conversations about the past (see also McLean & Thorne, under review).

While the study of memory telling is gaining momentum, more can be done to detail and define the features of memory telling contexts that are important to meaning-making and identity development. One reason that studying functions helps to define memory telling contexts is that stories change based on the intent of the person telling them (e.g., Sanitioso, Kunda, & Fung, 1990; Tversky & Marsh, 2000), which suggests that certain features of narratives, such as meaning, may or may not be included in narratives depending on why one is telling the memories.

In one of the few existing studies on specific memory telling functions (see Alea & Bluck, 2003 for a review), Pasupathi, Lucas, and Coombs (2002) found that telling memories to explain the self was the most common reason for which long-married couples reported sharing memories with each other. While Pasupathi et al.'s (2002) sample was markedly different from the late adolescents examined in the present study, the use of self-explanation was expected to be manifest in the study of late adolescents as well because their social networks are expanding (Carstensen, 1995), affording many new opportunities to explain oneself to others.

Most pertinent to the present research, a recent study found that telling for self-related reasons versus for entertainment were each associated with reporting quite different narratives of past events. In a retrospective study with college students, Pasupathi (in preparation) examined how memory telling functions were related to linguistic features of narratives using the Linguistic Inquiry and Word Count Program (LIWC) for text analysis (Pennebaker & Francis, 1999). The LIWC is a computer-based program that computes a word count analysis of language style.

Participants were asked to report a recent experience (in the last two weeks) that they had told someone about. They were then asked to indicate why they had told the memory by referring to a list of functions and rating each function on a 7-point likert scale. Pasupathi focused on the self-related functions of meaning-seeking and meaning-transmitting, and the function of entertainment. The linguistic features examined in the narratives included causal and insight words. She found that insight words were more common in memories told to seek and transmit meaning than in memories told to entertain.

While Pasupathi's study employed a linguistic and not a narrative analysis, her results indicate that telling for entertainment versus telling for meaning-related or self-related reasons are associated with different narrative constructions. The main contribution of the present study was to extend Pasupathi's work by being one of the first studies to take a narrative approach to memory telling functions. In addition, rather than examine recent memories that were not clearly related to the self, the present research examined memories that were at least one year old and that were regarded as self-defining. Like Pasupathi, memories told for entertainment and self-explanation were compared with regard to the presence of explicit references to meaning in the memory narratives. If results similar to Pasupathi's are found in the present study, it will strengthen the argument that functions of telling are related to different narrative constructions and will help to explain how meaning is differentially used in telling memories to others. Functions of telling may be only one piece to understanding how narratives are formed and whether meaning is

included in those narratives, but it is an important piece since we know that most memories are told to others (Rimé et al., 1991; Thorne et al., in press). Further, it will move the study of narrative construction further into the social world as the features of the telling context that are important to narrative construction are illuminated.

Telling Audience

To expand on features of the telling context that may be important to functions and to situate self-telling with respect to an important aspect of adolescent identity development, relational development (e.g., Grotevant & Cooper, 1985; Youniss & Smollar, 1985), this study also examined to whom memories were told for the functions of self-explanation and entertainment, as well as to how many people memories were told for the different functions. While parental and family relationships maintain their importance in adolescent development, peer relationships increase in importance and intimacy during adolescence (Cooper & Cooper, 1992; Grotevant & Cooper, 1985; Sullivan, 1953; Youniss & Smollar, 1985). The transition to college is a particularly important time for peer relationships because adolescents' immediate social networks are mainly comprised of peers, who may then be the likely audiences for memory telling. Further, establishing and strengthening peer networks is important for a successful adjustment to college (Shaver, Furman, & Buhrmester, 1985) and self-telling may be one way to strengthen such networks. Therefore, based on prior research about relational development and the importance of new relationships in college, it was

expected that late adolescents would be more likely to tell self-explanation memories than entertainment memories to their peers for two reasons. First, when meeting new people one communicates who one is so that self-explanation should be common. Second, self-explanation involves communicating and focusing on an important part of the self, while entertainment involves focusing on the act of entertaining. Therefore, self-explanation telling should be more likely to serve as a relationship builder by developing mutual understanding through more personal self-disclosure.

This study also examined whether there were differences in telling entertainment and self-explanation for families, but no predictions were made for this analysis. Two possible outcomes are that telling rates are equal for self-explanation and entertainment, or that telling for self-explanation is also more common with family audiences. If results show the former pattern it might indicate that families may not be contexts that have specialized functions for memory telling in late adolescence. If the results show the latter pattern it would indicate that self-explanation is ubiquitous across audiences during late adolescence as identity is constructed, confirmed, and shared.

In terms of to how many people individuals had told their memories, there was little past research from which to base predictions, so no hypotheses were made. However, there are two reasonable possibilities that would both be useful for understanding memory telling functions in late adolescence. One possibility is that telling for self-explanation is more intimate than telling for entertainment so that

fewer people are told such memories. Such a finding would indicate that some memories are more private than others, suggesting that some aspects of identity are not for general consumption. A second possibility is that memories are told at equal rates for each function. The latter finding would suggest that memories told for self-explanation and entertainment are readily available for self-telling and that telling for such functions does not reveal the most intimate aspects of one's identity. The findings concerning the breadth of audience will help to delineate whether some aspects of identity are more readily brought forth in the social context of memory telling, and would also enlarge understanding of how the context of memory telling may be different depending on the function employed.

The Present Study

The purpose of this study was to examine the association between reported meaning in narratives of self-defining memories and functions of memory telling. In Study 1 a descriptive analysis of reported functions was conducted because no prior studies have examined what telling functions are for late adolescents or what they are for self-defining memories.

In Study 2, self-explanation and entertainment, the two most common functions, and the frequency of meaning reported for each function were examined. Telling for self-explanation should be comparable to the combined functions of meaning-seeking and meaning-transmitting that Pasupathi (in preparation) studied because past work has suggested that meaning-making is a self-focused process (e.g., McLean & Thorne, 2003). Therefore, while it was expected that meaning

would be infrequent overall, replicating prior studies (McLean & Thorne, 2003; Thorne et al., in press), it was expected that memories told to explain the self would contain more meaning than memories told to entertain. Further, because self-explanation should be a self-focused function and because insights theoretically represent deeper forms of self-understanding, as opposed to behavioral or procedural understanding, it was expected that insights, rather than lessons, would be more commonly reported in memories told for self-explanation.

In terms of the telling audience, it was expected that self-explanation memories would be more commonly shared with peers than would entertainment memories. No predictions were made for family audiences. Exploratory analyses also examined whether memories told for self-explanation versus entertainment were shared at different rates to understand whether memory functions define some memories as more socially available than others or whether memories are equally shared.

Method: Study 1

Participants

The overall sample consisted of 185 participants, 42% male (n = 89) collected from the psychology subject pool at a public university in Northern California. Age ranged from 16-27 years (m = 18.7 years; sd = 1.2). Sixty-two percent of the participants described themselves as Caucasian (n = 115), 17% Asian (n = 31), 6% Latino (n = 11), 1% African-American (n = 2), 14% mixed race (n = 11)

14), and 4% of the participants were categorized as other (n = 7). Two percent of the participants did not report ethnicity (n = 5).

Self-defining Memory Questionnaire

Appendix A contains the self-defining memory questionnaire used in this study. The first page of the questionnaire elicited demographic information (gender, age, and ethnicity) and described features of a self-defining memory. A self-defining memory was described as a memory that is vivid, highly memorable, personally important, at least one year old, and is the kind of memory that conveys powerfully how one has come to be the person one currently is (see Singer & Moffitt, 1991-1992, p. 242). Participants were asked to report three self-defining memories.

The first section of each page included instructions for participants to caption, or title, the self-defining memory and to report their age at the time of the event. Participants were then asked to describe the self-defining memory, including where they were, whom they were with, what happened, and the reaction of themselves and others who may have been involved in the event. The latter narrative was termed the *event narrative*.

The second section of each page asked participants to indicate with how many people they had shared the memory. Then, if they could recall a specific episode of having shared the memory, participants were asked to indicate with whom they had shared the memory and how long after the original event the memorable telling episode occurred. They were then asked to describe the telling

episode, including what led them to tell the memory, the reaction of the listener, and their own reaction. The latter narrative was termed the *telling narrative*. The questionnaire provided an equal amount of space to describe the event and the telling narratives. This questionnaire, adapted from Singer and Moffit (1991-1992), has been used in prior studies of approximately 200 college students (McLean & Thorne, 2003; Thorne & McLean, 2002; 2003; Thorne, et al., in press).

A supplement to the self-defining memory questionnaire was added for the purposes of this study in an effort to induce participants to elaborate how memory telling may help one to better understand shared memories. After each page that elicited an event narrative and a telling narrative was a question eliciting further information about the telling episode, if one was reported. Participants were asked to describe if and how telling the memory helped them to better understand it. This narrative was termed the *understanding narrative*.

To target functions, participants were provided a list of functions from which to indicate why they had told the memory. The five functions were developed based on pilot data and past research, were mutually exclusive, and were comprised of the following: to validate one's thoughts or feelings about the memory, to better understand the memory (meaning-seeking), to entertain others, to explain oneself to someone, or to get closer to someone (intimacy). Participants were also given the option of specifying an alternative reason for telling the memory. These functions were developed for a late adolescent sample. Future studies could consider other functions that may differ by age group, such as teaching by example.

The paper-based questionnaire was completed while participants were in a room alone. Participants were given as much time as they needed to complete the task, which took an average of 30-60 minutes.

Results: Study 1

Frequencies of Different Telling Functions

Figure 1 displays the frequencies of different telling functions using memories as the unit of analysis. Of 554 memories, 357 included a report of why the memory was told that fit into the categories listed above. Overall, selfexplanation was the most commonly reported function (27%), followed by entertainment (17%), validation (9%), intimacy (8%), and meaning-seeking (3%). For 16% of the memories participants reported their own reason for telling (e.g., to feel better, to relive the event, to reminisce, to show off) or chose more than one reason for telling, the latter of which were excluded from the analyses. For 20% of the memories participants did not report a function.

Study 2 examined the prevalence of meaning in memories told for the two most common functions, self-explanation and entertainment, to whom the memories were told, and the number of people to whom memories were told.

Method: Study 2

The same participants and questionnaire were used in Study 2, but only the memories told for self-explanation (n = 148) and for entertainment (n = 95) were examined in relation to reported meaning for each function, audience role, and the number of people to whom memories were told.

Coding of Meaning in Self-defining Memory Narratives

Three mutually exclusive meaning-related categories (no meaning, lesson learning, gaining insight) were coded as present or absent on the basis of the event, telling, and understanding narratives (McLean & Thorne, 2001).

Lesson learning was defined as reference to having learned a tangible and specific lesson from the memory that has implications for subsequent behavior in similar situations.

Gaining insight was coded if the reporter inferred a meaning from the event that applied to larger areas of his or her life. Narratives coded as gaining insight typically referred to transformations of self or relationships. Insight was defined as super-ordinate to lesson learning; that is, if both lesson learning and gaining insight were present, the narrative was coded as gaining insight. However, the latter case rarely occurred in this study or in other similar studies (see McLean & Thorne, 2003). Examples of lessons and insights are shown in Table 1.

The author coded all narratives for meaning and was blind to the function employed while coding. A coder who was blind to the aims and hypotheses of the study and to the functions coded 30% of the memories for the purposes of reliability. Reliability was acceptable for meaning overall, kappa = .83; no meaning, kappa = .86; lessons, kappa = .78; and insights, kappa = .84. After reliability was achieved, random cases were chosen for the blind coder to code in order to prevent coder drift in the author. Difficult cases were settled by consensus.

Results: Study 2

The first set of analyses compared proportions of particular combinations of memory features, using memories rather than individuals as the unit of analysis.

Memories were used as the unit of analysis to preserve the integrity of particular memory patterns (e.g., memories told for self-explanation, which contained insights). The alternative of aggregating memory features across individuals would have muddied these highly specific memory patterns. Due to the dichotomous nature of the memory features and the dependent nature of the responses (participants provided more than one memory), the Mcnemar test for paired proportions was employed (Glass & Hopkins, 1996). Although this test is commonly used to assess differences in proportions due to time lapse, it may be used to assess differences in proportions with other kinds of dependent or correlated observations.² An alpha level of .05, two-tailed, was used for all statistical tests.

Preliminary Statistics: Descriptives and Gender

Table 2 contains the means and standard deviations of the variables pertinent to this study. The means in Table 2 allow comparison of the present results to prior studies that have used similar surveys and coding systems. Ninety percent (n = 492) of the memories had reportedly been told in the past, a percentage similar to past studies (e.g., Thorne et al., in press). The presence of meaning (29%) was slightly higher than the 23% found by Thorne et al. (in press). Because this study included an additional understanding narrative that was not included in past studies, and which may have accounted for the higher percentage of meaning, the percentages of

meaning for each narrative were examined. However, only 1% of the meaning emerged in the understanding narrative, suggesting that the addition of that narrative was not the reason for more reported meaning than Thorne et al. (in press) found (9% of the meaning was reported in the event narrative and 19% of the meaning was reported in the telling narrative).

Gender differences were examined on the main variables of interest to determine if subsequent analyses should include gender. The only gender difference found was that females were more likely to tell memories for self-explanation than for entertainment, Mcnemar Chi-Square = 10.56, p < .001. There was no difference in the frequency of memories told for entertainment and self-explanation for males. There was also no difference between males and females on the frequency of memories told for self-explanation or for entertainment. Across all participants there was also no difference between males and females for audience role or the number of people told. Because gender differences were relatively inconspicuous in this sample subsequent analyses did not include gender.

Ethnicity was not analyzed because sample sizes precluded testing among ethnic groups, and grouping all non-Caucasian participants into one group seemed inappropriate.

The role of the audience was identified in the telling narrative, in which the participant was asked to indicate to whom the memory was told. Using memories as the unit of analysis, percentages of different audience roles were: friends (38%), parents/family (14%), romantic partners (7%), teachers/coaches (5%), peers/family

(2%), strangers (.2%), and others not captured in the previous categories (11%). These percentages show that peers make up a large part of the audience for telling self-defining memories in late adolescence. Subsequent analyses for this study examined only the audience of peers (friends + romantic partners) and family.

Memories Told for Self-explanation

The first question was whether there were different frequencies of no meaning, lessons, and insights in memories told for self-explanation. It was expected that meaning would be infrequent overall, but that in comparing lessons and insights, insights would be more common than lessons. Memories were the unit of analysis for the following analyses.

Figure 2 shows the frequencies of lessons, insights, and no meaning in memories told for self-explanation, the most commonly reported function in the present study. As expected, reporting no meaning was significantly more common than reporting either kind of meaning (lessons + insights), Mcnemar Chi-Square = 16.22, p < .001. Also as expected, in looking only at the presence of meaning, insights were more commonly reported than were lessons, Mcnemar Chi-Square = 9.88, p < .01.

Memories told for Entertainment

The next question focused on whether there were different frequencies of no meaning, lessons, and insights in memories told for entertainment, the second most commonly reported function in the present study. It was expected that meaning

would be infrequent overall. Memories were the unit of analysis for the following analyses.

Figure 3 shows the frequency of lessons, insights, and no meaning in memories told for entertainment. Like memories told for self-explanation, no meaning was more commonly reported than was reporting either kind of meaning (lessons + insights), Mcnemar Chi-Square = 40.46, p < .001. There was no significant difference in the frequencies of lessons and insights in memories told for entertainment.

Comparing Meaning in Memory Functions

The final question concerning functions and meaning was whether there were different frequencies of meaning in memories told for self-explanation compared to memories told for entertainment. It was expected that total meaning (lessons + insights) would be more common in memories told for self-explanation in comparison to memories told for entertainment.

Figure 4 shows the frequency of memories with lessons and insights for each function of entertainment and self-explanation. As expected, total meaning (lessons + insights) was more common in memories told for self-explanation than in memories told for entertainment, Mcnemar Chi-Square = 15.75, p < .001. Insights were also more common in self-explanation memories than in entertainment memories, Mcnemar Chi-Square = 15.02, p < .001, and there was no significant difference for the report of lessons.

Because these statistical data are drawn from a data set of rich narratives, a content analysis was done to delineate what was being communicated for the two functions. Narrative data provides a unique opportunity that many survey studies do not provide to illuminate specific experiences that individuals feel are part of their self-representation. Therefore, the content analysis examined the topics reported for the memories told for entertainment and self-explanation. Table 3 shows the categories and percentages of memories per category that were found in memories told for each function. As can be seen in Table 3, memories told for self-explanation were most likely to be comprised of factual memories or time points in one's life story. For example, fact/time point memories included that birthday celebrations are important in one's family or that one began home schooling in the 7th grade. Interestingly, the next two most common topics for self-explanation were about relationships, focused on either relational loss (e.g., death, divorce, break-ups) or relationship gain (e.g., falling in love, feeling close to one's family). Learning about one's values and how the world works were also relevant to self-explanation, as were achievement memories, and activity based memories (e.g., being part of a drumming circle).

The largest category of entertainment memories was mishaps. This category was largely comprised of physical accidents (e.g., car accidents, getting hit in the face) or stories of adventures and escapades that had the potential to, or did go awry (e.g., snowboarding and almost getting hurt). Achievement was also present in

entertainment memories, as was adolescent rebellion (e.g., getting drunk, high, or arrested) and stories about happy or fun times, relationships, and comical incidents.

Audience Role and Functions

The results now turn to the role of the audience and the telling function employed. The question for this set of analyses was whether self-explanation and entertainment were differentially directed at peers or families. It was expected that peers would be more likely to hear stories of self-explanation than entertainment. No predictions were made for family audiences.

Figure 5 shows the frequencies of memories told for self-explanation and entertainment for family and peers. As expected, peers were more likely to hear memories told for self-explanation than for entertainment, Mcnemar Chi-Square = 16.34, p < .001. There was no difference in the frequency of telling for self-explanation versus entertainment with families as the audience.

It should also be noted peers were significantly more likely to be the recipients of both entertainment and self-explanation tellings, compared to family; for entertainment, Mcnemar Chi-Square = 18.78, p < .001, and for self-explanation, Mcnemar Chi-Square = 64.99, p < .001.

How Many People Were Told

The final set of analyses examined to how many people self-explanation versus entertainment memories were told. The dependent variable, number of people told, was a linear feature of memories, so that the comparison of the two functions was made with *t*-tests. For these analyses, the sample consisted of the 95

memories that were told for entertainment, and the 148 memories that were told for self-explanation. Because participants sometimes reported more than one memory per function, the number of tellings was averaged so that each person had one "how many told" variable per memory function.

Analyses also had to take into consideration the complication that some people reported both self-explanation and entertainment functions, whereas other people only reported one of these functions. Therefore, two strategies were employed in the t-test analyses. *Split sample* analyses were used to compare how many people were told for participants who reported *either* telling for self-explanation or telling for entertainment, but not both (n = 107 participants; 40 participants who told for entertainment, 67 participants who told for self-explanations). *Within sample* analyses were used to compare how many people were told for participants who reported telling some memories for entertainment *and* some memories for self-explanation (n = 34).

The variable of interest, how many people were told, was averaged across the number of memories each person reported.³ Memories that were reportedly told to more than 20 people were transformed so that all audiences that were reported as greater than 20 were equal to 20 in order to control for outliers (e.g., some people reported telling 500 people).

An alpha level of .05, two-tailed, was used for all the *t*-tests.

Using the Split sample, there was no significant difference in the number of people who were told a memory for entertainment (m = 8.15, sd = 5.24) compared to

the number of people who were told a memory for self-explanation (m = 7.41; sd = 5.92), independent t(104) = .66 p = ns.

Using the Within sample, however, there was a difference in the number of people told. Memories told for entertainment were told to more people (m = 12.66, sd = 7.32) than were memories told for self-explanation (m = 8.66, sd = 6.65), paired t(33) = 2.46, p < .05. Because there was a difference in the two samples, caution will be exerted in interpreting these findings.

Narrative Examples

To elucidate these statistical findings, the results now focus on the narratives from which the statistical analyses derived. Consider the following narrative examples of memories told for self-explanation and entertainment.

Self-explanation. Ed, 18 years old, reported telling the following memory for the purpose of self-explanation. The original event occurred at age 16 or 17, and he told 5-10 good friends. The insight reported is indicated in italics, and shows how an important aspect of Ed's identity developed and was communicated to others.

[Event Narrative, age 16 or 17] I was at my friend's house one night with my main group of friends. They were all smoking marijuana and drinking. I didn't feel comfortable with trying marijuana. They tried hard to get me to try it but I chose not to. One of my friends (my best) supported my choice. I learned who my real friends were. But more importantly, I learned that I can be strong with my decisions if I choose to, regardless of the outside influence.

[Telling Narrative, age 17 or 18] The subject of drugs came up and so I explained the above story to them. They seemed to enjoy the story and applauded me on my resiliency. Now, my friends here will ask me if I want to do anything and they won't harass me about it, regardless of my answer. It pays to be strong when you want to. [Understanding Narrative] ...the message is fairly obvious, but every time a situation similar to that one comes up, I can think back and tell myself that I can be firm with my decision, whatever that might be.

Ed's narrative illustrates how meaning can be used to communicate aspects of identity to others. Ed's narrative also offers a good example of meaning in a self-defining memory narrative, as well as how meaning is shared with others to maintain and to strengthen aspects of identity.

Entertainment. In contrast to Ed's narrative of meaning-making and the growth of self-understanding, Bobby reported a memory told for entertainment. Bobby, 18 years old, was 16 when the following event occurred. He reportedly told the memory to more than 10 people and he told his brother several weeks after the event occurred. There was no meaning reported in the following event, telling, and understanding narratives.

[Event Narrative, age 18] We had this one planned out for weeks before. It's not that we didn't like the girls but they were just our opposites, the female version of us. So we decided to use my house as a home base and proceeded at 1AM to do as much damage as humanly possible to all six houses. This was probably one of the more fun moments of my life as we raced around the San Fernando Valley TP'ing their houses till they looked like white waterfalls. And the best part, the following Monday at school, five of the six girls ended up blaming the sixth one and her house got TP'd the following week too. Truly a great couple of weeks. [Telling Narrative, age 18] He wanted to know what I was up to and of course he was in college so nothing I did was probably too important. So I decided to tell him about this little incident. Of course I over dramatized it and made it into some huge quest. He absolutely loved the story, from buying \$100 worth of toilet paper to speeding away from Western Security. And I love telling the story too, so I get just as much of a kick out of it. [Understanding narrative] ... I understand it pretty well. I played it over quite a bit in my mind.

Bobby's narrative contrasts to Ed's in that there appeared to be no effort towards reporting or understanding the greater meaning of this event. However, he has chosen it as

one of his self-defining memories, suggesting that this adventure is an important part of his identity.

Summary of Results

Overall, meaning was infrequently reported for both functions. In comparing functions, meaning was more commonly reported in memories told for self-explanation versus memories told for entertainment. Within memories told for self-explanation, insights were more common than were lessons, and insights were also more common in memories told for self-explanation than in memories told for entertainment. Peers were more likely to be the recipient of self-explanation tellings than of entertainment tellings, and there was no difference in function when families were the audience. In terms of the number of people told, results differed depending on the sub-samples used for analyses. Those who told memories either for self-explanation or entertainment reported no difference in the number of people told. Those who reported telling memories for both entertainment and self-explanation reported that memories told for entertainment were told to more people than were memories told for self-explanation.

Discussion

This study is the first to take a narrative approach to studying memory telling functions and the first to study functions of telling self-defining memories in late adolescence. Mirroring studies with other age groups (Pasupathi et al., 2002), telling for self-explanation was the most commonly reported function. Further, mirroring a study with college student's most recent memories, but using different

analytic strategies (Pasupathi, in preparation), telling for self-explanation and entertainment involved reporting different kinds of narratives, the latter of which were less likely to show meaning than the former. In terms of distinguishing meaning, which prior studies of the associations between memory functions and meaning have not done, the present study found that insights were more frequently reported than were lessons in memories told for self-explanation, suggesting that insights do a better job of explaining the self than do lessons. This study also found that intimacy and meaning-seeking, though infrequent, were reported as functions of telling memories, as has been shown in past research (Alea & Bluck, 2003). However, telling to validate one's thoughts or feelings about the memory was reported as the third most common reason for telling, a function that has not been addressed in past studies and is an interesting avenue for future research. In terms of audience, peers were more likely to be the recipients of self-explanation stories than of entertainment stories, suggesting that self-explanation may be a way of developing relationships during the college transition. Finally, the relation between memory function and breadth of the telling audience was ambiguous because results differed depending on the sub-sample that was used for analyses, but possible interpretations of these results will be discussed. The implications of all of these findings will now be addressed.

Telling Functions: Self-explanation

Meaning appears to be more relevant or appropriate when telling for selfexplanation, compared to telling for entertainment. Telling for self-explanation may allow one to develop, strengthen, and to confirm insights about the self; by explaining who one is one may become more certain that the shared story is indeed indicative of his or her identity. For example, the insight that Ed gained about his strength of character and who his friends were helped him to understand more about himself. In telling the memory he seemed to be confirming his self-views with likeminded people, and other's acceptance in turn appeared to strengthen Ed's self-views, revealing a cyclical process of self and social functions of memory telling (Nelson, 2003).

Illustrating the importance of telling memories to explain oneself in peer relationships, Ed also showed how he received support from his new college friends in telling his story about abstaining from drugs. The participants in this study were experiencing the transition to college, during which one's family and friends are often left behind, at least temporarily. Making new friends and establishing social networks is of crucial importance to a successful transition into college (Shaver et al., 1985), and self-explanation may kick into high gear to develop relationships with others. Indeed, Ed appeared to be trying to find common ground with his new friends to see if they would accept him.

In thinking about the importance of peer relationships for telling to explain the self, it is interesting that relational concerns were the most common topic for memories told for self-explanation, when collapsing relational losses and gains.

Relational concerns may be commonly shared with peers to communicate where one has been in relationships and what one needs. For example, some of the

relational gain and loss memories were about being wronged by a friend or about when a friend did something supportive, which communicates what one's values are in relationships and what one's needs are. Telling vivid and specific memories to people may be a more efficient way to communicate these needs than talking in the abstract. The distinction between relational gains and losses echoes a recent study on self-defining relationship memories in adolescence, which distinguished between separation and closeness as key concerns of such memories (McLean & Thorne, 2003). The results of this study suggest that relationships are not only an important part of one's internal self-representation, but are also crucial to explaining oneself to others.

The majority of the rest of the self-explanation memories fit into the facts/time points category and were a varied group of memories. They were put under the category of "fact" because that is the way they were reported, often without explicit meaning and as a fact of one's past. For example, a memory about getting a new kitten and feeling very close to it appeared to indicate that one holds cats, or animals, in high regard. Many of the memories also seemed to be marking time points, such as breaking one's leg at age 15, moving to the United States from Vietnam at age 11, or one's mother getting married at age seven. It is possible that one of the first tasks of life story development is to mark the important time points that will later be tied together in constructing the entire story.

While self-explanation was more common than entertainment in telling to peer groups, there was no difference in telling functions for family audiences. There

are several possible explanations for this. First, new peer groups may be the focus in this transition period and families may not be as important as recipients of self-defining memories. Second, some adolescents may think that their families already know who they are so that there is no need to engage in self-explanation.

Conversely, adolescents may think that their families can not understand who they are so they do not bother trying.

In terms of the specific kinds of meanings in self-explanation memories, it appears that insights may explain the self more clearly than do lessons. This is in line with the conceptualization of insights as meanings that represent the deepest aspects of identity (McLean & Thorne, 2003). However, insights may also be more commonly communicated than are lessons because insights focus more frequently on positive transformations in self-understanding and it may be a self-protective measure to tell insights rather than lessons, which focus on one's wrong doings (e.g., Greenwald, 1980; Ross & Wilson, 2003). For example, Thorne et al. (in press) found that listeners responded more positively to insights than they did to lessons. Therefore, insights may be more commonly reported in memories told to explain the self either because they serve the purpose of self-explanation better or because they are safer to tell than are lessons.

Although the above findings suggest that insights are important for self-explanation, it is not yet clear what purpose lessons might serve. Clearly lessons help one to learn the rules of human interaction and how to get along in the world (e.g., don't drive drunk), but how do lessons serve the development of a sense of

identity? Perhaps lessons help one to locate oneself in the world of adult morals and values as one learns what is acceptable to others and what is acceptable to oneself.

Future research might explore the role of lessons in identity construction by further examining the kinds of events that lead to lesson learning and how lessons influence later behavior and belief-systems.

Telling Functions: Entertainment

While memories told for self-explanation appear to be an important part of identity construction due to the presence of explicit meaning, memories told for entertainment were also chosen as self-defining, suggesting that they also serve a purpose in identity development. Entertainment memories focused on episodes that have great potential to be good stories—mishaps. Stories in which something goes wrong and is resolved comprise the classic form of a good narrative (Labov & Waletsky, 1967). Perhaps telling mishap stories communicates some details of life experience about where one has been (e.g., river rafting, in the face of death, traveling around the world) in a light conversation so that the self comes across without the heavy demand on the teller and the listener that may come with more personal self-disclosure.

Adolescent rebellion was also included as an important kind of entertainment memory (see also McLean & Thorne, under review), and was often told as part of a conversation in which friends each shared their stories of rebellion. Rebellion stories may be a point of connection for late adolescents as they reflect on their early and middle adolescence when independence is of increasing importance,

which can be tested and established by rebellion. The rest of the entertainment memories (relationships, embarrassment, happy/fun, and comical) all appeared light hearted and were stories that were easy and safe to tell. Some of the memories were about playing games as a child, finding one's lost dog, enjoying one's friends, turning an experience with a failed test into a "screwball comedy," and getting in trouble for talking in class in grade school.

In looking at the topics of the memories told for different functions it became clear the self-explanation and entertainment focused on different topics, but some commonalities did exist. For example, achievement was reported in telling for both functions, but was more common in entertainment memories. Perhaps, telling achievement memories for entertainment takes some of the bragging out of the story so that others can enjoy the story more openly with the teller. Relationships, though reported for both functions, were more common in self-explanation memories than in entertainment memories, perhaps because self-explanation partly functions to develop relationships, as discussed above, or because relationships constitute an important part of identity.

Overall, entertainment memories appeared to be about humorous good times, mishaps, and adventures that had little to do with the kinds of narratives that researchers tend to focus on in studies of how memories represent the self. Thorne et al. (in press) reported a parallel finding to the present findings about entertainment, which was that leisure memories about vacations, fun times, and other such experiences were one of the four most common kinds of self-defining

memories in this age group. Thus, entertainment and leisure are important parts of late adolescents' experiences, are important to defining who they are, and are important to telling others about themselves. The purpose of entertainment memories in identity development may be to allow connection with others without the work of communicating meaning or engaging in deeper kinds of personal disclosure that may be more risky (see McLean & Thorne, under review). For example, Bobby's narrative of telling his brother about the toilet papering incident insinuated that the telling was intended to gain recognition of an identity that Bobby was trying to construct. In connecting with others by telling memories for entertainment one can find acceptance of one's stories and thus, oneself. Further, remembering the humorous, comedic, and adventurous parts of one's life may be just as important as recalling meaning-filled memories or memories that represent less entertaining aspects of the self (McLean & Thorne, under review).

Breadth of Audience in Telling Self-defining Memories

The number of people to whom memories were told was examined as a proxy for how socially entrenched the memories were with regard to functions, yet something unexpected arose in investigating this question. There was no difference in the number of listeners told for each function for those who reported telling memories either for self-explanation or for entertainment. However, when looking at participants who reported telling for both self-explanation and entertainment, memories told for entertainment were told to more people. The latter finding suggests that because memories told for entertainment were shared more widely,

entertainment memories are more socially entrenched. However, because there was a difference in findings for the two sub-samples, an interpretation that rests on functions is not appropriate. Instead, these findings may be indicative of individual differences in how people represent their memories. People who reported memories told for both self-explanation and entertainment may make relatively finer grained distinctions in the use of their memories. Perhaps for the latter group, entertainment memories serve the social functions more readily, and self-explanation memories are slightly more private. For the group that had no difference in the number of people told, finer distinctions between memories may be less common. However, this set of findings needs to be taken with caution until these results can be replicated. Other individual difference variables should be included in a future study to see if there is indeed a difference between these groups or if this is a spurious finding.

Another issue to consider for future research is the reliability of participant's recall of the number of people with whom they have shared memories. Perhaps asking participants to write down each person with whom they have shared a memory and when they shared it would lead to more reliable estimates. Such information would also provide a more detailed landscape of what kinds of audiences are told across time.

Infrequency of Meaning

Overall this study adds to growing evidence that explicit reports of meaning may not be necessary, or even central, to communicating the self to others (McLean

& Thorne, 2003; Thorne et al., in press). One can say who one is by offering a memory as an example without discussing the meaning that may or may not be connected to that memory. For example, Madeline, age 19, wrote about an experience in preschool where she was playing with a friend and ended up falling and cutting her chin, where she still has a scar. She told her boyfriend about the event 14 years later to explain herself to him, "I told him about the event because he asked how and when I got the scar on the bottom of my chin. I told him the story and he looked at me and we both laughed at my 'special moment.' I laughed with him." In the understanding narrative she wrote, "I already understood why I did what I did. I think by telling someone else I was able to share a part of my early childhood." Meaning does appear to exist for Madeline because she alluded to an understanding of the event, but that meaning was not shared because she either did not want to or did not feel it was needed to get her point, or her self, across.

There are two possible explanations for the relative infrequency of meaning in late adolescent's self-defining memory narratives. The first is that meaning is not reported frequently because of the limitations of the questionnaire method.

Interviews or methods that press for longer narratives and perhaps longer time perspectives may prompt one to talk about the development of self-understanding more so than asking for written episodes of self-definition that are confined in space and time.

The second explanation regarding the infrequency of meaning is that meaning may truly be infrequent. Meaning may be particularly important in

constructing narratives of difficult or traumatic experiences (see Pals, under review; King et al., 2000), but not in constructing narratives of all of the varied experiences that constitute identity. Meaning-making involves a complicated cognitive and narrative process and it is possible that meaning does not overwhelm one's narratives of past events because the cognitive and narrative effort to make meaning might sacrifice developing an extended story about the self. The life story involves many different kinds of stories—some of transformation, or meaning, and some of continuity (McAdams, 1988; see also McLean & Thorne, 2003). Stories of continuity may be less likely to contain meaning, but are equally important to understanding one's past, present, and future self. Perhaps most important to bear in mind when considering the results of the present study is that because memories do not have meaning does not signify that they are meaningless. Memories can be personally significant without reflecting on the greater meaning of the event. That many kinds of memories are reported as self-defining indicates that there are layers to the identities of late adolescents.

Limitations and Future Directions

Addressing some of the limitations of these studies is important for recognizing what this set of findings can not answer about the communication of meaning in social contexts, as well as for suggesting some important lines of inquiry that this work can motivate.

In terms of the questionnaire, there are several issues that future research designs might consider. It is possible that once the participant saw the first set of

questions eliciting the first memory narratives that he or she may have been primed to report more meaning in second and third memories, particularly in the telling narrative as that was the focus of the follow-up questions. The frequency of self-explanation may also have been an artifact of the questionnaire, which asked for self-defining memories. The latter is a difficult issue to remedy since the point of the study was to look at why memories that represent the self are told, but it should be taken into account when evaluating the frequency of self-explanation memories.

A second methodological issue is that the study was retrospective. Studying how conversational turns and ongoing experiences in memory telling affect memory construction is crucial to elaborating the process by which memories and identity are socially constructed. To extend the present findings and Pasupathi's (in preparation) findings, examining a priori motivations for telling and how narratives are constructed will be useful. Further, examining narrative construction when controlling for the function employed would pinpoint causal relationships between narrative construction and telling functions.

As mentioned previously, only spontaneous reports of meaning have been studied, but interview techniques that probe for meaning may find that meaning is more common than is indicated with questionnaires. If meaning is found to be more common in using other methodologies, further questions about how and why meaning is communicated to others can be addressed.

Although not necessarily a limitation, this study only examined one age group. It is possible that older adults might report more meaning because they have

had more time to reflect on the past and to make causal connections between their experiences, and because they are engaged in life review. Future work could also examine how memory telling functions might differ depending on one's life stage. For example, the development of intimacy might be a more important function in a young adult sample in which people are beginning to develop long-term romantic relationships (Alea & Bluck, 2003; Webster, 2003).

This study forced a choice between memory functions, which may not be not exclusive (McLean & Thorne, under review). Allowing participants to choose multiple functions would make possible an examination of how the same memories may serve different purposes in telling different listeners or in different telling contexts.

Lastly, there appear to be individual differences in memory telling that may extend to the use of functions. For example, using this same sample, McLean (2004) found that extraverts were more comfortable telling memories and told them more often than introverts. In terms of functions, there may be individual differences in identity development related to employing different functions. For example, because meaning is more common in telling for self-explanation than for entertainment, do those who "do" self-explanation more often than entertainment develop more coherent life stories? The latter question could be addressed in a study that measures the patterns of different functions one uses in telling memories to others and then follows the development of identity as measured by the quality or coherence of one's life story. Although memory telling and self development are heightened in

late adolescence, there may be individual differences that account for some important variance in how and why late adolescents tell self-defining memories to others and the implications of telling for life story development.

Conclusions

The interface between personal and social worlds has become more and more apparent in the burgeoning field of memory telling (see Pasupathi, 2001; Thorne, 2000; in press). Locating the abstract entity of identity in lived experience moves the field towards a more concrete and rich understanding of how identity is constructed and communicated. More specifically, considering the multiple contexts in which autobiographical memories are shared is a useful way to situate identity in the contexts in which it is constructed and communicated.

This study took a unique narrative perspective in looking at the functions of memory telling and how telling memories with and without meaning reveals different aspects of late adolescent's identities. Identity is represented by great variations in experiences and narrative constructions, such as deep reflections into one's personhood, as well as adventurous and joyous stories. Importantly, the many aspects of identity that are communicated to others are all valuable to understanding a person, regardless of the depth of reflection that is offered. Investigating the landscape of autobiographical memory and identity necessitates considering how many kinds of memories are used as people define themselves to and with others. Examining memory telling functions and the narratives used for those functions

allowed for a nuanced understanding of variations in identity and the contexts in which those variations were brought into the social world.

Endnotes

¹ Participants assigned to the "other" category either reported their ethnicity as "other," reported a religion, or reported an ethnicity that did not fit into the listed categories.

² To illustrate the application of the Mcnemar test, the proportion of memories showing the entertainment function and the proportion showing the self-explanation function were compared. Each memory was assigned a value for entertainment (no, yes) and for self-explanation (no, yes). Of the 554 cases (memories), 311 cases showed neither the entertainment nor the self-explanation function (0,0), 95 cases showed the entertainment function and not the self-explanation function (1,0), 148 cases showed the self-explanation function and not the entertainment function (0, 1), and no cases showed both the entertainment and the self-explanation function (1,1), which were defined as mutually exclusive. The Mcnemer test compares the frequencies in the diagonal cells, i.e., the number of cases showing (0,1) and (1,0), since these are the only cells which are informative. The squared difference between these 2 frequencies is divided by the sum of the 2 frequencies to compute the value of the Mcnemar Chi-Square.

³ For example, if someone reported two entertainment memories out of three memories he or she would have 66% entertainment memories. To test for how many people were told, the total number of people to whom the two entertainment memories were told was divided by two.

References

- Alea, N., & Bluck, S. (2003). Why are you telling me that? A conceptual model of the social function of autobiographical memory. *Memory*, 11, 165-178.
- Azmitia, M. (2002). Self, self-esteem, conflicts, and best friendships in early adolescence. In T. M. Brinthaupt & R. P. Lipka (Eds.), *Understanding the self of the early adolescent* (pp. 167-192). New York: SUNY.
- Baerger, D. R., & McAdams, D. P. (1999). Life story coherence and its relation to psychological well-being. *Narrative Inquiry*, 9, 69-96.
- Blagov, P. S, & Singer, J. A. (in press). Four Dimensions of Self-defining Memories (Specificity, Meaning, Content, and Affect) and their Relationships to Self-Restraint, Distress, and Repressive Defensiveness. *Journal of Personality*.
- Bruner, J. S. (1990). Acts of meaning. Cambridge, MA: Harvard University Press.
- Carstensen, L. L. (1995). Evidence for a life-span theory of socioemotional selectivity. *Current Directions in Psychological Science*, 4, 151-156.
- Cooper, C. R., & Cooper, R. G. Jr. (1992). Links between adolescents' relationships with their parents and peers: Models, evidence, and mechanisms. In R. D. Parke & G. W. Ladd (Eds.), Family-peer relationships: Modes of linkage (pp. 135-158). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Erikson, E. H. (1968). Identity: Youth and crisis. New York: W. W. Norton.
- Farrant, K., & Reese, E. (2000). Maternal style and children's participation in reminiscing: Stepping stones in children's autobiographical memory development. *Journal of Cognition & Development*, 1, 193-225.
- Grotevant, H. D. (1993). The integrative nature of identity: Bringing the soloists to sing in the choir. In J. Kroger (Ed), *Discussions on ego identity*, (pp. 121-146). Hillsdale, NJ: Erlbaum.
- Grotevant, H. D., & Cooper, C. R. (1985). Patterns of interaction in family relationships and the development of identity exploration in adolescence. *Child Development*, 56, 415-428.
- Glass, G.V., & Hopkins, K.D. (1996). Statistical methods in education and psychology. Boston, MA: Allyn and Bacon.
- Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist*, *35*, 603-618.
- Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin*, 126, 248-269.
- Harter, S. (1999). The development of self representations. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology: Social, emotional and personality development,* (pp. 553-618). New York, NY: John Wiley & Sons, Inc.
- King, L. A. (2001). The hard road to the good life: the happy, mature person. Journal of Humanistic Psychology, 41, 51-72.

- King, L.A., Scollon, C. K., Ramsey, C. & Williams, T. (2000). Stories of life transition: Subjective well-being and ego development in parents of children with Down Syndrome. *Journal of Research in Personality*, 34, 509-536.
- Kroger, J. (2000). *Identity development: Adolescence through adulthood.*Thousand Oaks, CA: Sage Publications.
- Kuebli, J., & Fivush, R. (1992). Gender differences in parent-child conversations about past emotions. Sex Roles, 12, 683-698.
- Labov, W., & Waletzky, J. (1967). Narrative analysis. In J. Helm (Ed.), *Essays on the verbal and visual arts* (pp. 12-44). Seattle: University of Washington Press.
- McAdams, D. P. (1988). *Power, intimacy and the life story*. New York: Guilford Press.
- McAdams, D. P. (1993). The stories we live by: Personal myths and the making of the self. New York: William Morrow & Co, Inc.
- McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology*, *5*, 100-122.
- McCabe, A., Capron, E., & Peterson, C. (1991). The voice of experience: The recall of early childhood and adolescent memories by young adults. In A. McCabe & C. Peterson (Eds.), *Developing narrative structure* (pp. 137-174). Hillsdale, NJ: Erlbaum.
- McLean, K. C. (2004). *Individual differences in telling and making meaning of self-defining memories*. Poster presented at the Society for Personality and Social Psychology, Austin, TX.
- McLean, K. C., & Thorne, A. (2001). Manual for coding meaning-making in selfdefining memories. Unpublished manuscript, University of California, Santa Cruz.
- McLean, K. C., & Thorne, A. (2003). Adolescents' self-defining memories about relationships. *Developmental Psychology*, 39, 635-645.
- McLean, K. C., & Thorne, A. (under review). Constructing the Days and Nights of Our Lives: Functions of Telling Self-Defining Memories in Late Adolescence.
- Nelson, K. (2003). Self and social functions: Individual autobiographical memory and collective narrative. *Memory*, 11, 125-136.
- Nelson, K., & Fivush, R. (2000). Socialization of memory. In E. Tulving, & F. I. M. Craik (Eds.), *The Oxford handbook of memory*, (pp. 283-295). New York, NY: Oxford University Press.
- Pals, J. L. (under review). Transforming the self: A two-dimensional process model of identity construction within narratives of difficult life events.
- Pasupathi (in preparation). Told and never told tales: Written narratives about personal experiences are affected by prior disclosure.
- Pasupathi, M. (2001). The social construction of the personal past and its implications for adult development. *Psychological Bulletin*, 127, 651-672.

- Pasupathi, M., Lucas, S., & Coombs, A. (2002). Conversational functions of autobiographical remembering: Long-married couples talk about conflicts and pleasant topics. *Discourse Processes*, 34, 163-192
- Pennebaker, J. W., & Francis, M. E. (1999). Linguistic inquiry and word count. Mahwah, NJ: Erlbaum.
- Piaget, J. (1965). The moral judgment of the child. New York: The Free Press.
- Pillemer, D. B. (1992). Remembering personal circumstances: A functional analysis. E. Winograd & U. Neisser (Eds.), Affect and accuracy in recall: Studies of "flashbulb" memories. Emory symposia in cognition, 4, (pp. 236-264). New York, NY: Cambridge University Press.
- Pratt, M., Norris, J. E., Arnold, M. L., & Filyer, R. (1999). Generativity and moral development as predictors of value-socialization narratives for young persons across the adult lifespan: From lessons learned to stories shared. *Psychology and Aging*, 14, 414-426.
- Rimé, B., Mesquita, B., Philippot, P., & Boca, S. (1991). Beyond the emotional event: Six studies on the social sharing of emotion. *Cognition & Emotion*, 5, 435-465.
- Ross, M., & Wilson, Anne E. (2003). Autobiographical memory and conceptions of self: Getting better all the time. Current Directions in Psychological Science, 12, 66-69.
 Rubin, D. C., Rahhal, T. A., & Poon, L. W. (1998). Things learned in early adulthood are remembered best. Memory & Cognition, 26, 3-19.
- Sanitioso, R., Kunda, Z., & Fong, G. T. (1990). Motivated recruitment of autobiographical memories. *Journal of Personality and Social Psychology*, 59, 229-241.
- Singer, J. A., & Bluck, S. (2001). New perspectives on autobiographical memory: The integration of narrative processing and autobiographical reasoning. *Review of General Psychology*, 5, 91-99.
- Singer, J. A., & Moffitt, K. H. (1991-1992). An experimental investigation of specificity and generality in memory narratives. *Imagination, Cognition, and Personality, 11,* 233-257.
- Singer, J. A., & Salovey, P. (1993). The remembered self: Emotion and memory in personality. New York, NY: Free.
- Shaver, P., Furman, W., & Buhrmester, D. (1985). Transition to college: Network changes, social skills, and loneliness. In S. Duck & D. Perlman (Eds.), *Understanding personal relationships: An interdisciplinary approach* (pp. 193-219). London: Sage.
- Snow, C. E. (1990). Building memories: The ontogeny of autobiography. In D. Cicchetti, & M. Beeghly (Eds.), *The self in transition: Infancy to childhood*, (pp. 213-242). Chicago, IL: The University of Chicago Press.
- Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York: W. W. Norton.

- Surra, C. A, & Bohman, T. (1991). The development of close relationships: A cognitive perspective. In G. J. O. Fletcher & F. D. Fincham (Eds.), *Cognition in close relationships*, (pp. 281-305). Hillsdale, NJ: Erlbaum.
- Thorne, A. (2000). Personal memory telling and personality development. Personality & Social Psychology Review, 4, 45-56.
- Thorne, A. (in press). Putting the person into social identity, *Human Development*. Thorne, A., & McLean, K. C. (2002). Gendered reminiscence practices and self-definition in late adolescence. Sax Polas: A Journal of Passagrah, 46, 261
 - definition in late adolescence. Sex Roles: A Journal of Research, 46, 261-271.
- Thorne, A., & McLean, K. C. (2003). Telling traumatic events in adolescence: A study of master narrative positioning. In R. Fivush & C. Haden (Eds.), Connecting culture and memory: The development of an autobiographical self (pp. 169-185). Mahwah, NJ: Erlbaum.
- Thorne, A., McLean, K. C., & Lawrence, A. (in press). When remembering is not enough: Reflecting on self-defining events in late adolescence. *Journal of Personality*.
- Tversky, B., & Marsh, E. J. (2000). Biased Retellings of Events Yield Biased Memories. *Cognitive Psychology*, 40, 1-38.
- Webster, J. D. (2003). The reminiscence circumplex and autobiographical memory functions. *Memory*, 11, 203-215.
- Youniss, J. & Smollar, J. (1985). Adolescent relations with mothers, fathers, and friends. Chicago: University of Chicago Press.

Table 1

Narrative Examples of Lessons and Insights

Lesson

[Event Narrative] I went traveling in the Amazon rainforest last year to study the wildlife and culture of Peru. While there, I along with the group had a chance to go swimming in the water. Not 10 minutes went by before I was stabbed by an unknown creature. Within 5 minutes, I was in so much pain (from the venom) that I could hardly think. It would be another 6 hours before the drugs kicked in, so I really had to focus myself. I had always wondered how I would react if something painful like that happened to me, so I was very alert to what I was doing. Instead of questioning whether I was going to die or not, my main focus was to get myself as relaxed as possible. I tried breathing slowly and relaxing my muscles. The experience showed me that in that situation, I would not freak out, but rather protect myself as best I could. [Not Told]

Insight

[Event Narrative]...She's Mexican, and we constantly talked about the differences in our two cultures and lifestyles. I'm middle class while she hardly has any money, and I speak English while she doesn't very well. We just kept talking about how hard her life is in college without money and the language. It really made me realize how lucky and privileged I am and how many changes the world still needs. [Telling Narrative] I told the story to all my trusted family members. They would ask me how I liked my roommates, and I would tell them that I loved her and that she made me reevaluate my life. Every time I told the story, I felt a new found admiration for my roommate, and I think the people I told the story too felt the same way. They also felt glad, as did I, that I was getting the experience...
[Understanding Narrative] Every time I told someone about it, I understood more and

more what a fantastic experience it was for me and how much I admired and respected my roommate.

Table 2

Means and Standard Deviations of Relevant Variables

Variable	Mean (SD)	
Subject Age	18.75 (1.19)	
Age in Memory	13.33 (3.09)	
Lessons (%)	.11 (.18)	
Insights (%)	.19 (.25)	
Total Meaning (%)	. 29 (.31)	
How Many People Were Told	7.70 (5.34)	
Functions (%)		
Self-explanation	.27 (.30)	
Entertainment	.17 (.23)	
Validation	.09 (.17)	
Intimacy	.08 (.16)	
Meaning-seeking	.03 (.11)	

Table 3

Topics of Self-explanation and Entertainment Memories

Self-explanation Entertainment Topic Topic Percent Percent Facts/Timeline 30 Mishaps 31 Relational Loss/Difficulty Achievement 27 17 Relational Gain/Nice Moments 20 Happy/Fun 13 Learning About the World/ Values Rebellion 12 11 Funny/Comical Achievement 8 12 Activity Relationships 9 3 Embarrassment

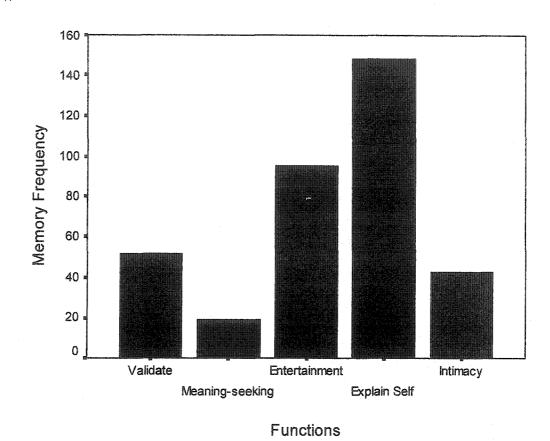


Figure 1. Frequencies of each telling function.

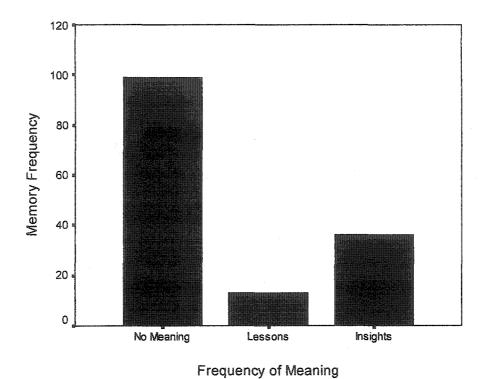


Figure 2. Frequency of lessons, insights, and no meaning in memories told for self-

explanation.

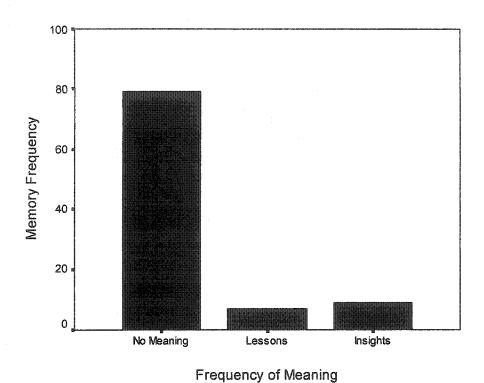


Figure 3. Frequency of lessons, insights, and no meaning in memories told for entertainment.

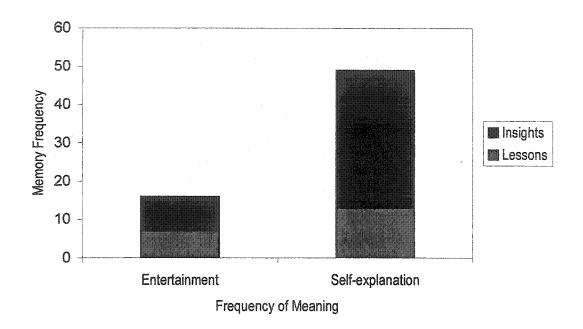


Figure 4. Frequency of insights and lessons in memories told for self-explanation and for entertainment.

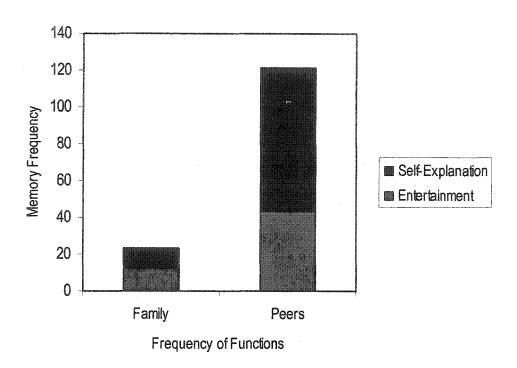


Figure 5. Frequency of Telling Functions and Audience Role.

Appendix A

Self Defining Memory Questionnaire

Definition of a Self-Defining Memory

A self-defining memory is a personal memory that has the following attributes:

- 1. It is at least one year old.
- 2. It is a memory of a specific event in your life that you remember very clearly and that still feels important to you even as you think about it now.
- 3. It is a memory that helps you to understand who you are as an individual and might be the memory you would tell someone else if you wanted that person to understand you in a more profound way.
- 4. It may be a memory that is positive or negative, or both, in how it makes you feel. The only important aspect is that it leads to strong feelings.
- 5. It is a memory that you have thought about many times. It should be familiar to you like a picture you have studied or a song (happy or sad) you have learned by heart.

To understand best what a self-defining memory is, imagine you have just met someone you like very much and are going for a long walk together. Each of you is very committed to helping the other get to know the "Real You" ... In the course of conversation, you describe several memories that you feel convey powerfully how you have come to be the person you currently are. It is precisely these memories that constitute self-defining memories.

Task

On the next 3 pages, please jot down a <u>caption or one-sentence summary</u> for each of <u>three self-defining memories</u> that come to mind. Then describe each memory with enough detail to help your imagined friend see and feel as you did. Although these memories will be kept confidential, please do not reveal memories that are so painful as to make you feel uncomfortable describing them.

PLEASE REPORT:			
Gender	Age	Ethnicity	Alexander of the second se

Memory #1 Caption
(a brief sentence to identify the event) My age at the time of the original event Other person/persons involved in the event
<u>Description of the event:</u> where you were, whom you were with, what happened, how you and others reacted. Include details that will help an imagined friend see and feel as you did.
With about how many different people have you shared the above event, or memory?
1. To whom did you describe the event?
2. About how long after the event did you tell them about it?
Please vividly describe the story of how you told them about the event: What led you to tell them about it, how did you tell them, what was their reaction, and your reaction?

If you reported an episode of telling Memory 1 to someone else, please answer the following questions. You may have answered some of these questions in your description of telling the memory, but please also answer them here.

1. Why did you share this memory? (Please circle only	one)
 to validate your feelings or opinions about the men to get a get a better understanding of the memory for entertainment to explain yourself or your life to someone else to get close(r) to someone other 	mory
2. Did telling this memory help you to understand it?	If so, how?
3. Did you feel comfortable sharing this memory? Wh	ny or why not?
4. Would you tell this memory in a different way to a explain why and how you would tell it differently, and differently.	

The following questions are about memory telling in general.

	eneral, how eone else?	often do yo	u tell a memo	ory that	you view as self-d	efining to		
	_	2		3	4	5		
	never	rarely	occas	ionally	frequently	5 all the time		
	o is the audie ase circle on		hom you are	most li	kely to share a self	f-defining memory?		
1. 2.	parents or f friends	amily						
3.	-							
4.	teacher or o							
5.	other							
	at is the <u>mos</u> cle only one)		reason that yo	ou share	self-defining men	nories with others?		
1.	to validate	your feeling	gs or opinions	s about	the memory			
2.	to get a bett	ter understa	inding of the	memory	7			
3.	for entertain	nment						
4.	to explain y	ourself or y	your life to so	meone	else			
5.	to get close							
6.	other	······································						
4. Hov	v often does	telling a mo	emory to som	eone el	se help you to und	erstand it?		
1	2		3		4	5		
never	rare	ely .	occasionally		4 frequently	every time		
5. Are	you general				ning memories wit	h others?		
			No	Yes				
	_		-		ent understanding) comebody, how did			
• •	Overall, ho	w difficult	was it for you	ı to reca	ll the memories yo	ou wrote about it here?		
	1		2	3	4	5		
Easy					4 Very difficult			
-			58					
			56	,				