Intergenerational Transmission of Historical Events via Memory

by

Connie Svob

A thesis submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Department of Psychology
University of Alberta

Abstract

Intergenerational transmission of memory is a process by which biographical knowledge contributes to the construction of collective memory (a representation of a shared past). The purpose of the present research project was to investigate the mnemonic properties implicated in the intergenerational transmission of historical and non-historical events from a parent's life. This was accomplished in a series of three studies.

In Study 1, the intergenerational transmission of life stories in two groups of young adults was investigated: a Conflict group and a Non-Conflict group. Only those in the Conflict group had parents who had lived through violent political upheaval. All participants recalled and dated ten important events from a parent's life. There were three main findings. First, both groups produced sets of events that displayed a *reminiscence bump*. Second, the majority of the events in both groups were transitions, which were perceived to have exerted significant psychological and material impact on a parent's life. Third, in the Conflict group, 25% of recalled events were conflict-related. This indicates that historical *conflict knowledge* is passed from one generation to the next and that it is understood to have had a personally-relevant, life-altering effect. Moreover, the findings suggest that transitional impact and perceived importance help determine which events will be remembered from a parent's life.

Study 2 served to replicate and extend the findings of Study 1. The primary interests of the second study were two-fold: (1.) to examine characteristics of important historical and non-historical events from a parent's

life, and (2.) to better understand their importance for the next generation. This was accomplished by running the same 3-Phase paradigm as in Study 1 with three groups of young adults, children of: refugees, voluntary immigrants, and Canadians. The scale ratings in Phase 3, however, were extended. There were several findings. Historic events from a parent's life were greater in their transitional impact on the parent's life and perceived self-relevance for the subsequent generation than were non-historic events. Both sets of events demonstrated a positivity bias and were fairly frequently rehearsed. Functionally, important parent-events served self, directive, and social functions for the subsequent generation. Uniquely, the most important functions of historical events were to better understand one's parent and oneself. Taken together, these findings provide insight into the properties of important historical and non-historical events that are transmitted across generations, as well as their functions for future generations.

In Study 3, the intergenerational transmission of historical conflict knowledge and xenophobia via a parent's life story was examined in post-war Croatians. Two groups of young adults were compared from: (1.) Eastern Croatia (extensively affected by the war) and (2.) Western Croatia (affected relatively less by the war). The methodology was the same as the one used in Study 2. Subjects were asked to (a) recall the ten most important that occurred in one of their parents' lives, (b) estimate the calendar years of each, and (c) provide scale ratings on them. Additionally, (d) all subjects completed a modified Bogardus Social Distance scale, as well as (e) War Events Checklist

for their parents' lives. There were several findings. First, approximately two-thirds of Eastern Croatians and one-half of Western Croatians reported war-related events from their parents' lives. Second, outright social ostracism and aggression toward out-groups were rarely expressed, independent of region. Nonetheless, in-group cohesion and solidarity were notably higher in both regions. Third, identity was implicated in social attitudes (Eastern Croatia) and correlated with a parent's war experiences and degree of life story rehearsal (Western Croatia). This suggests a parent's individual experiences can impact the next generation's identity, but is insufficient to impact their social attitudes. Further, it suggests identity and social attitudes are predominantly socially constructed. Finally, the temporal distribution of events surrounding the war produced an upheaval bump, suggesting major transitions (e.g., war) contribute to the way collective memory is formed.

Keywords: autobiographical memory, collective memory, intergenerational transmission, Transition Theory, social distance, xenophobia

Preface

The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name: "Intergenerational Transmission", No. Pro00018565, 11/09/2010.

Some of the research conducted for this thesis forms part of an international research collaboration, led by Professor Vladimir Takšić at the University of Rijeka, with Professor Norman R. Brown being the lead collaborator at the University of Alberta.

Katarina Katulić from the University of Osijek and Valnea Žauhar from the University of Rijeka assisted with data collection and the translation of research materials from English into Croatian for the study presented in Chapter 4.

Chapter 2 of this thesis has been published as C. Svob and N. R. Brown (2012), "Intergenerational transmission of the reminiscence bump and biographical conflict knowledge," *Psychological Science, 23,* 1404-1409. Professor N. R. Brown was the supervisory author and was involved with concept formation and manuscript edits.

All other data collection, literature reviews, data analyses, and research interpretations are my original work.

Acknowledgements

This work would not have been possible without the support of several people, most especially, my graduate advisor, Dr. Norman R. Brown. He welcomed me into his research lab several years ago, always recognized my potential for success, and challenged me to realize it. Over the years, I have deeply appreciated his patience, guidance, and brilliant dry sense of humor. I have learned much from his meticulous and rigorous approach to research, and have admired his intrepid and original style. By forging novel and creative pathways to research problems, he taught me that research is not only a science, but also an art. I am also deeply indebted to Dr. Brown for his selfless, tireless, and valiant efforts to ensure I complete my program successfully. He helped me endure "the slings and arrows of outrageous fortune" and fought "against a sea of troubles" in an attempt to end them. (If only Hamlet had been as fortunate to have Dr. Brown as an advisor!) For all of the support Dr. Brown has extended to me, I consider him not only a great mentor, but also a friend. Any future success I attain, I share with him.

I would also like to extend my appreciation to the members of my supervisory committee, Dr. Peter Dixon and Dr. Kimberly Noels. Both extended unwavering support to me over the years, as well as helpful comments on my work. For their fairness, astuteness, and compassion, I remain most grateful. Thank you, as well, to Dr. Anthony Singhal and Dr. William Hirst for serving as the external examiners on my committee. Your incisive questions and comments challenged and deepened my understanding. I am most grateful to you all.

I would also like to thank my fellow (past and present) labmates: Dr. Peter Lee, Oliver Schweickart, Amelia Shi, Cory Tam, and Dr. Tugba Uzer. Your support, help, and friendship were important sources of strength and learning for me. I couldn't have been as successful as I have been without you.

I would also like to acknowledge several institutions and researchers I visited and worked with as a graduate student: Oxford University (Blackfriars Hall), Center on Autobiographical Memory Research at the University of Aarhus (Dr. Dorthe Berntsen), University of New Hampshire (Dr. David Pillemer), and University of Rijeka (Dr. Vladimir Takšić). You all helped form and inform me as a scholar. Your contribution to my education has been invaluable.

I would also like to thank the Social Science and Humanities Research Council (SSHRC) for their generous funding and support of my work.

I am deeply indebted to the kindness and support of so many throughout my graduate career, from friends to mentors. I am sorry to not have the space to thank you all. But, please know that each kind and supportive gesture has been noted and most appreciated. My belief in the goodness of humanity has been upheld by the kindness of so many. I thank you from the bottom of my heart.

Finally, I could have never accomplished this work without the loving support of my family. For my parents who always believed in me, and my little sister who always looked up to me, I wouldn't be who I am today without you. I remain most grateful and humbled by your steadfast generosity, goodness, and love. I share this success with you.

Table of Contents

List of Tables

List of Figures

Chapter I

INTRODUCTION

"The most effective way to destroy people is to deny and obliterate their own understanding of their history."

– George Orwell

One of the seemingly unique features of humans is the ability to transmit knowledge explicitly across time and space (Tomasello, 2001). The capacity to pass on information from one individual to another and, by extension, from one group to another, forms the foundation of cultural stability (Schönpflug, 2001). Further, it ensures the potential and impetus for flourishing and growth as lessons from the past are remembered and applied by future generations. As people grapple with terrifying historical events, including those from the past century, the importance of preserving historical memory and incorporating the lessons of history into the creation of tolerant societies becomes ever more vital and apparent (Welzer, 2005). The individual, cognitive processes implicated in the historical transmission process, however, remain little known. To begin to understand the cognitive mechanisms involved in the transmission of history naturally necessitates a discussion contextualized in memory. As such, the purpose of the present research project is to examine the mnemonic properties implicated in the intergenerational transmission of historical events.

There are several ways in which memory may be implicated in the transmission of history. In general, memory can be said to have an evolutionary advantage (as well as, a biological function) to the extent that it aids current behavior (Boyer, 2009). Psychologists have distinguished between various forms

of memory that are relevant when discussing the intergenerational transmission of memory. First, Tulving (1983) created a triarchic theory of memory that incorporated procedural, semantic, and episodic memory. *Procedural memory* includes motor skills, expectations, and priming responses that are modeled on past experiences. These tend to serve direct biological and motor functions. *Semantic memory* contains declarative and accessible knowledge of the world. Whatever is stable across time belongs to semantic memory. And, *episodic memory* is, in essence, the *what*, *when*, and *where* of a past experience. Extending Tulving's model, there is also *autobiographical memory*, a higher-order memory system that relates semantic memory and episodic memory (Conway, 2005; Conway & Pleydell-Pearce, 2000); it is the remembrance of past events from a person's life. These events take the general form of narratives that can contribute to a person's life story (McAdams, 2001). Finally, *collective memory* is a shared representation of a common past (Zaromb, Butler, Agarwal, & Roediger, 2014); a form of memory that transcends individuals and is shared by a group, but is present in each individual, as well (Roediger, Zaromb, & Butler, 2009). The present discussion focuses primarily on the latter forms of memory –autobiographical memory in individuals and collective memory in groups. While the focus will be predominantly on collective memory (memory that is shared), autobiographical memory will serve as a foundation and comparison point for individual mnemonic processes.

Collective memory is a term that was originally developed by Halbwachs (1952/1992). It was adopted into conversations among a disparate group of

social scientists, including historians (Novick, 1999), sociologists (Schuman, Schwartz, & D'Arcy, 2005), and anthropologists (Cole, 2001). These groups tended to explore memory for the historical past "in the world" through memorial monuments, cultural artefacts, embodied rituals, and historical documents (Connerton, 1989; Geertz, 1973; Mannheim, 1952; Olick, 1999). In the more recent past, psychologists have also taken up the study of collective memory. Rather than examine memory in the material world, however, psychologists tend to study it "in the heads" of individuals (Brown et al., 2009; Harris, Keil, Sutton, Barnier, & McIlwain, 2011; Hirst & Manier, 2008; Luminet, Bouts, Delie, Manstead, & Rimé, 2000; Roediger, Zaromb, & Butler, 2009). As a result of its multidisciplinary nature, the complex phenomenon of collective memory has been fragmented by the various groups that study it into explorations of either the world or the head.

Present Research Project

In the present research project, I attempt to bridge collective memory in the world with memory in the minds of individuals within a psychological framework. I accomplish this by adapting laboratory-based methods in cognitive psychology to the real world, and take seriously both material and psychological aspects of historical events. Whereas lab-based experiments exert stringent control to predict behavioral responses, I sacrifice some control in order to attain real-world application. As such, memory for the events that I examine are not artificially produced and controlled in the lab (e.g., as word lists in verbal learning experiments). Rather, the events are reported from people's personal

lives and experiences. Despite the inherent variability produced by experience, basic mnemonic patterns and operations may still be observed.

Specifically, I conduct three studies on the intergenerational transmission of a parent's life story. In all three, I examine the ways in which historical events are perceived, transmitted, and remembered by the next generation. I approach this investigation from the perspective of *Transition Theory* (Brown, Hansen, Lee, Vanderveen, & Conrad, 2012; Brown & Lee, 2010; Brown et al., 2009; Nourkova & Brown, 2014; Zebian & Brown, 2014), a theory of memory that suggests major life transitions structure and organize memory. Importantly, Transition Theory accounts for both material and psychological changes wrought by historical events, and considers their impact on memory. Each study is presented as a complete experiment, including its own introduction, methods, results, discussion, and reference sections, respectively.

In Study 1, I begin with an empirical exploratory study comparing adult children of parents who immigrated to Canada due to violent, political upheaval and adult children of parents who did not (i.e., Canadians). Employing a 3-Phase paradigm, participants were asked to (a) nominate the ten most important events from one of their parents' lives, (b) to estimate the dates of each nominated event while talking aloud, and (c) to rate each event on various measures. Several points of interest were addressed in the first study, including the degree of historical conflict knowledge that is transmitted via a parent's life story, the degree to which children use historical events to date events from their parents' lives, the temporal distribution of these events in memory, and the role of

transitions (e.g., immigration) and rehearsal on event selection. Study 1 provided a foundation upon which the following two studies could then be conducted.

In Study 2, the same 3-Phase paradigm from Study 1 was adapted to include more ratings to investigate the characteristics and potential functions of historical and non-historical events from a parent's life. Further, the groups that were compared were refined and expanded into three groups of young adults: children of (a) refugees, (b) voluntary immigrants to Canada, and (c) Canadians. The purpose of this study was to replicate the findings of Study 1, to expand upon our understanding of the events that are transmitted through a parent's life story, and to investigate the functions they might serve in the second-generation.

In the final study, Study 3, the same paradigm as in Study 2 was used and expanded to include five, rather than three phases. The participants comprised two groups of young adults from post-war Croatia. One group's parents lived through the Croatian War in a region that suffered extensive damage and loss (Eastern Croatia), while the other group's parents lived in a region that was relatively less impacted by the war (Western Croatia). The first three phases of the experiment were the same as in Study 2. Additionally, in Phase 4, subjects were asked to complete a modified version of the Bogardus Social Distance scale (Bogardus, 1928), and in Phase 5, participants were asked to indicate their parents' war experiences on the War Events Checklist (Karam, Al-Atrash, Saliba, Melhem, & Howard, 1999). The final study expanded the inquiry of mnemonic properties of transmitted historical events to social attitudes, such as xenophobia, and considered the role of group identity in the process.

Overview of Topic in Psychology

The topic of intergenerational transmission of historical events via memory has received relatively little attention to date. Investigations of this sort have circled the topic of interest, but have not pursued it directly. To begin, most psychological studies on intergenerational transmission have emerged from clinical psychology on the transmission of trauma from parents to their children (Dekel & Goldblatt, 2008; Kaitz, Levy, Ebstein, Faraone, & Mankuta, 2009; Rowland-Klein & Dunlop, 1997; Weingarten, 2004; Yehuda, Bell, Bierer, & Schmeidler, 2008), but have had little, if anything, to say about its potential implications for memory, and vice versa. Another area that has come close has investigated the role of parental reminiscing styles with young children and their effects on memory development and psychological flourishing (Duke, Lazarus, & Fivush, 2008; Fivush, Bohanek, & Zaman, 2011; Fivush, Haden, & Reese; 2006). In general, more elaborate reminiscing styles in parents predict greater memory capacity and language development in children. These studies, however, fail to address memory for a parent's life; rather, they focus on how parents reminisce about shared events with their children. Another area of research that has considered knowledge of a parent's life has focused on the sharing of family stories across the life span and their positive impact on overall well-being (Pratt & Fiese, 2004). Again, though, the mnemonic properties of sharing family stories have been overlooked. In the present project, I attempt to fill this gap by examining the mnemonic characteristics implicated in the intergenerational transmission of historical events between a parent and adult

child. To this end, I focus on the memories of adult children for their parent's life, and use autobiographical memory as a foundation for exploring knowledge of a parent's life story.

Larsen and Plunkett (1987) conducted one of the only studies that have examined the direct relation between memory for autobiographical events and reported events. Reported events were those where a person received information from a person or social agency, which were referred to as *reception events*. Larsen and Plunkett used emotional and non-emotional cue words to elicit either experienced or reported events in two groups of subjects. The temporal distributions for the two types of events were comparable, as were the effects of using emotion words as cues – both were slower in the retrieval of emotion versus object cues. Furthermore, the response time measures for reported events were longer than for experienced events. Taken together, the findings suggested that reported events are forgotten (or, become inaccessible) at the same rate as experienced events and, importantly for the present study, that reported events may be accessed indirectly through memories associated with autobiographical events. This finding supports using autobiographical memory as a foundation and comparison point for investigating reported events from a parent's life.

Research on memory for reported events has been extensive for public events as observed in the vast literature on *flashbulb memories* (highly detailed memories for the context in which a person receives surprising news; Brown & Kulik, 1977). The findings on this topic are variable and contentious with

varying conclusions on what constitutes a flashbulb memory (Conway, Skitka, Hemmerich, & Kershaw, 2009; Hirst et al., 2009; Talarico & Rubin, 2003) and debate on whether flashbulb memories require special mechanisms, or if they can be categorized simply as memories of special and distinctive experiences (McCloskey, Wible, & Cohen, 1988). For the purposes of the present project, these issues are generally irrelevant as the focus here is not on the context in which reported events are received. Rather, the primary interest is on the historical events themselves, and the ways they are associated in memory. Moreover, the events of interest derive from a parent's life story and, although some may be public, the majority are learned through direct contact with the parent.

There has, of course, also been research on memory for historical events. In most of cases, however, the focus has been primarily on those who have lived through the events themselves and does not account for the experiences of prior generations (Berntsen & Thomsen, 2005; Brown et al., 2009; Conway & Haque, 1999; Wagenaar & Groeneweg, 1990). As such, the present research project will be able to complement the findings of these studies as they extend to subsequent generations.

It should also be noted that there have been several studies that have examined memory for historical events by people of different generational cohorts (Liu et al., 2009; Schuman, Akiyama, & Knäuper, 1998, Tessler, Konold, & Reif, 2004; Zaromb, et al., 2014). These studies are also interested in the ways that history is perceived, conceived, and remembered. Their focus,

however, is more general and impersonal. None of the studies have considered what is transmitted directly from a parent's historical experiences. As such, the transmission process of historical knowledge from one generation to the next via a parent's life story remains largely unexplored and unknown.

Finally, there have been several compelling investigations of collective memory from the perspective of social sharing and collaborative remembering that have proved fruitful in considerations of collective memory (Harris, Paterson, & Kemp, 2008; Harris et al., 2011). These studies are relevant for the present topic as memory for a parent's life story includes shared remembering. In general, it has been shown that social sharing of memories aids memory. Further, some psychologists have attempted to apply observations from collective memory in the world to the laboratory, such as retrieval induced forgetting experiments of the terrorist attacks of September 11th, 2001 (Coman, Manier, & Hirst, 2009) and the role of repeated retrieval in shaping collective memory (Roediger, et al., 2009). Although interesting and relevant with respect to the social dimension of memory, in the end, the mnemonic aspects of social sharing between parents and children in the transmission of history remain unexplored. To address this gap in knowledge, I extend methodological techniques that have been used in autobiographical memory to the biographical memory of a parent's life, with particular focus on events of historical significance.

Basic Assumptions

Before proceeding, it should be noted that there are several assumptions that underlie the present research. First, I assume it is possible to have a shared working understanding of various mnemonic terms (e.g., *autobiographical memory*). To be sure, many disagreements remain on various terms, however much work in psychology has established common and generally accepted terms and methods of inquiry that I, in turn, adopt and accept.

Second, although much psychological inquiry into memory has focused on it as an isolated process, I assume that memory can invariably be bound up with other things. That is, memory exists and emerges from a complex system, one that is intricately connected to other cognitive processes, including perception, attention, and emotion. Further, it may also be implicated in higher-order thought processes that are linked to goals, judgment and decision-making, social attitudes, and identity.

Third, memory tends to presuppose a representation (in the broadest of terms) of the past and the presumption that the representation is accurate. I adopt this assumption to a certain degree; however, I also make a distinction. There is much research that demonstrates memory is distorted, biased, and often inaccurate in its details (Neisser, 1981; Nourkova, Bernstein, & Loftus, 2004; Saachi, Agnoli, & Loftus, 2007; Wagenaar, & Groeneweg, 1990). One cannot discuss the distortion of memory, however, without presupposing an accurate representation of a past event as a comparison point (Wertsch, 2009). As such, I accept Neisser's (1981) notion that memory is often *re-episodic* (a prototypical

aggregate derived through repeated exposure and rehearsal). Memory may not always be accurate in its details, but it is generally true in its substance. Consequently, the accuracy of the event memory becomes of secondary importance in the present project. Rather, I focus on the properties of the events that are recalled and reported, their temporal distributions, and their correlations with other factors.

Chapter II

STUDY 1 – INTERGENERATIONAL TRANSMISSION OF THE REMINISCENCE BUMP AND BIOGRAPHICAL CONFLICT KNOWLEDGE

Abstract

The intergenerational transmission of life stories in two groups of young adults was investigated: a Conflict group and a Non-Conflict group. Only those in the Conflict group had parents who had lived through violent political upheaval. All participants recalled and dated ten important events from a parent's life. There were three main findings. First, both groups produced sets of events that displayed a reminiscence bump. Second, the majority of the events in both groups were transitions, which were perceived to have exerted significant psychological and material impact on a parent's life. Third, in the Conflict group, 25% of recalled events were conflict-related. This indicates that historical *conflict knowledge* is passed from one generation to the next and that it is understood to have had a personally-relevant, life-altering effect. Moreover, the findings suggest that transitional impact and perceived importance help determine which events will be remembered from a parent's life.

Keywords: intergenerational transmission, autobiographical memory, reminiscence bump, conflict knowledge, collective memory, Transition Theory

Intergenerational Transmission of the Reminiscence Bump and Biographical Conflict Knowledge

Historical knowledge can be acquired through life stories that are passed on from one generation to the next (Assmann, 1995). Memory is selective, however, and the stories originally shared by one generation might not be the same stories remembered by future generations (Schuman, Akiyama, & Knäuper; 1998). To investigate the intergenerational transmission of personal experiences and historically-significant public events, we asked young adults to list the ten most important events in a parent's life and to think aloud as they estimated the date of each. Participants also indicated why they believed that these events were an important part of their parent's life story. Two groups were compared: young adults whose parents lived through violent political upheaval (the *conflict* group) and young adults whose parents grew up in Canada (the *non-conflict* group). Given these data, it was possible to catalogue those aspects of a parent's biography that are considered important and to determine why they are considered to be so. Also, because we collected data from people whose parents who had lived through periods of military conflict and/or social upheaval, it was possible to determine whether parental biographies serve as a conduit for the intergenerational transmission of *conflict knowledge*. In other words, we wanted to understand what people know of their parents' lives and whether they (the children) are aware of the external circumstance that shaped those lives. This is an important issue because it grounds collective memory in the experience of a

generation and demonstrates how this form of knowledge can be absorbed vicariously by the next.

Currently, there is much research that concerns cultural transmission. For instance, a number of factors are known to play a role in the intergenerational transmission of parental values and behaviors. These include the selectivity (what, where, when, how), speed, and direction (e.g., vertically across generations; horizontally among peers) of transmission (Nauck, 2001; Schönpflug, 2001; Schönpflug, 2009; Tomasello, 2001; van Geert, 2009). In contrast, little is known about the characteristics of the events selected for remembrance by subsequent generations.

Although little work has been done on the memorial mechanisms implicated in intergenerational transmission, the research that exists suggests sharing and recalling family stories is important for optimal cognitive and psychological functioning. For instance, family knowledge has been shown to be a predictor of successful functioning in children and adolescents, revealing lower levels of anxiety, higher self-esteem, and greater abilities for overcoming educational and psychological challenges (Duke, Lazarus, & Fivush, 2008; Fivush, Bohanek, & Zaman, 2011). More elaborative parental reminiscing styles have also been shown to enhance recall and narrative abilities in preschool-aged children (Fivush, Haden, & Reese; 2006). Further, sharing memories with children has been shown to promote greater problem-solving capabilities, enhance interpersonal relationships, and help regulate emotions (Kulkofsky, Wang, & Koh, 2009). Most of the studies on the mnemonic aspects of

intergenerational transmission have focused on child development, however, and have mostly targeted shared memories, rather than events specific to a parent's life.

For the most part, the way a parent's life is understood and remembered in adulthood has received little attention. The issue is, nonetheless, of substantial importance; especially when a parent has lived through historical events, such as war, terrorism, or revolution. The degree to which personal memory is transformed into historical memory has implications for the construction and maintenance of group identity, as well as the persistence of group conflict (Bar-Tal, 2007; Halbwachs, 1952/1992; Hirst & Manier, 2008; Pennebaker, Paez, & Rimé, 1997; Tessler, Konold, & Reif, 2004). By examining the mnemonic mechanisms implicated in the intergenerational transmission of autobiographical events, we provide insight into the ways recent history is represented and understood, and the mechanisms involved in selecting events from a parent's life for future recall.

Transition Theory

We contextualize the intergenerational transmission of personal and historical events within a theory of autobiographical memory. This is because the representation and process of recalling autobiographical events may be similar to the representation and process of recalling biographical events. Moreover, recalling important events from a parent's life may include shared experiences, which include both autobiographical and biographical details. As

such, it is reasonable to suspect that characteristics observed in autobiographical memory might also be observed in the recall of events from a parent's life.

The temporal distribution of autobiographical memories often reveals a *reminiscence bump* -- an overrepresentation of events that occurred between 10- to 30-years of age (Rubin & Schulkind, 1997). Several theories attempt to explain this observation, including the potential role of biological mechanisms (Janssen & Murre, 2008), the prevalence of novel events during one's formative years (Rubin, Rahhal, & Poon, 1998), cultural life script expectations (Berntsen & Rubin, 2004), and the self-defining characteristics established throughout adolescence and early adulthood (Conway, 2005). We propose, however, that the *Transition Theory* of autobiographical memory might best account for the reminiscence bump, as well as predict the recall of important life events from a parent's life.

According to Transition Theory (Brown, Hansen, Lee, Vanderveen, & Conrad, In Press), major life transitions organize autobiographical memory. A *transition* is defined as the coordinated addition or deletion of various components in one's daily life. That is, when several salient features of a person's life change simultaneously (e.g., people, places, things), the transition becomes a referent for the end of one period of stability and the emergence of another (Brown & Lee, 2010; Brown, Lee, Krslak, Conrad, Hansen, Havelka, & Reddon, 2009). There are at least three types of transitional events that can disrupt the stability of a person's life. First, there are normative and culturally specific life script events, such as graduating from high school and getting a job

in Western society. Berntsen and Rubin (2004) refer to these as *cultural life-script events*. Second, there are non-normative, idiosyncratic events, such as personal failures or car accidents (Pillemer, 1998). Third, there are unexpected, externally imposed events that affect an entire group of people, such as outbreaks of war or natural disasters (Brown & Lee, 2010; Brown et al., 2009); we refer to these as *collective transitions* (Brown et al., In Press; Brown & Svob, 2012). Transition Theory accounts for all three forms of transition and predicts that the most important events recalled from a parent's life will be predominantly transitions.

Specifically, Transition Theory makes three predictions about the distribution and organization of important events recalled from a parent's life. First, because the majority of cultural life script transitions accumulate during the formative years (Berntsen & Rubin; 2004), we expect that the reminiscence bump will also be observed in the temporal distribution of events from a parent's life. Second, we expect to observe a bump for other major transitions, as well, such as immigration. Third, transitions, including collective transitions, are expected to be used as reference points for dating the recalled events, suggesting transitions aid in the organization and retrieval of events from a parent's life.

In sum, the present study explores the way events from a parent's life are remembered by subsequent generations, particularly when a parent has *lived-in-history* (Brown et al., 2009) and the child has not. We expect that, in accordance with Transition Theory, most important events recalled from a parent's life will be transitions that are perceived to have exerted both psychological and material

changes. Further, we suspect that the distribution and organization of events from a parent's life will resemble the distribution and organization of autobiographical memory, including a reminiscence bump and the use of transitional references in dating protocols.

Method

Participants

Two groups of psychology undergraduates at the University of Alberta participated in the study in exchange for partial course credit. The *conflict group* had 30 Canadians (14 males, 16 females) whose parents had emigrated from a country with violent political upheaval, including *Iran, Kurdistan, Lebanon, South Africa, Sierra Leone,* and the *former Yugoslavia.* The *non-conflict group* had 30 Canadians (13 males, 17 females) whose parents were born and raised in Canada. The mean age of the former group was 18.8 years; the latter group, 19.0 years.

Procedure

This experiment consisted of three phases. In Phase 1, participants identified the 10 most important events in one of their parents' lives and wrote a brief description of each on separate index cards. They were told that the event could be from any period, from the time their parent was born up to the present. Additionally, participants were asked to restrict the birth of children to one index card, if they chose to include it in their list, unless there was something distinct about the birth of a child. Further, subjects were asked to exclude their parent's birth as one of the important events.

In Phase 2, the events were randomly re-presented and the participants were asked to estimate the year of each while talking aloud. The verbal protocols were recorded on a digital recorder. In Phase 3, the events were re-presented once again, and the participants were asked to rate the degree to which their parent discussed each with them (0-not at all, 1-rarely, 2-frequently); the degree of psychological impact each event had on their parent, including their thoughts, attitudes, and emotions (0-none, 1-a little, 2-a lot); the degree of material impact, including changes to the people, places, and things in their parent's life (0-none, 1-a little, 2-a lot); and the degree to which each event was related to a historical event, such as war (0-not at all, 1-a little, 2-a lot).

Results and Discussion

The groups were comparable in parental choice: In the conflict group, 13 chose their mother and 17 their father; the non-conflict group chose each parent equally. The choice of parent did not affect the main pattern of results. The average parent's age at the time of the study was 51.3 years in the former group, and 51.8 years in the latter. Further, the average parent's age at the participant's birth was 33.0 years and 32.3 years, respectively. Finally, the average age of immigration in the conflict group was 23.4 years.

The temporal distribution of events exhibited a reminiscence bump in both groups, with the conflict group's mode being slightly later than the non-conflict group's (see Figure 1.1). Mean estimated age of reported events (with standard error of the mean in parentheses) was 32.1 (0.91) for the conflict group, and 28.7 (1.07) for the non-conflict group. The mean difference between groups

was statistically significant at the .05 level, $t(58) = 2.41$, $p < .05$, $d = 0.62$, 95% CI [0.57, 6.21]. This difference may be due to an inflation of events from the time of immigration for the conflict-group. Additionally, both groups demonstrate a mini-bump from the time the participant was born up to the present. This is particularly pronounced in the non-conflict group and may signify a recency effect (i.e., an accumulation of recent events) that is often observed in distributions of autobiographical memory (Rubin & Schulkind, 1997).

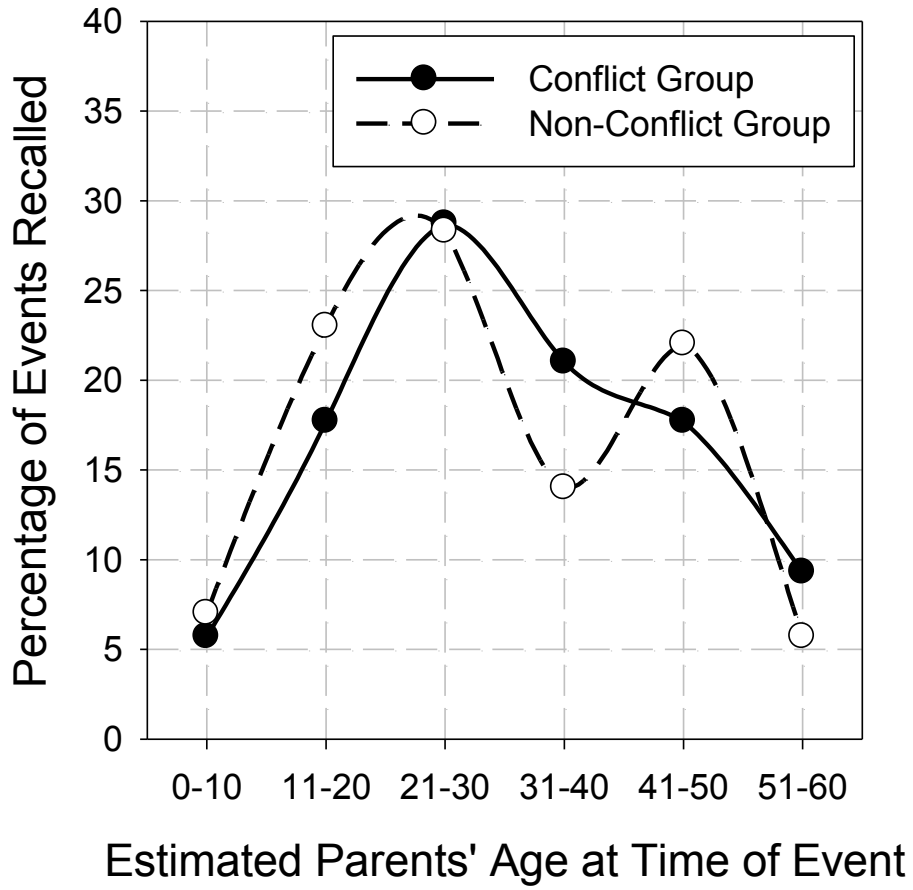

Figure 1.1. Temporal distribution of events recalled from parents' lives.

Out of 30 people in the conflict group, 28 listed immigration as one of the most important events in their parent's life. As predicted by Transition Theory, the distribution of important life events surrounding such a major transition creates its own bump, further suggesting that major transitions underlie the distribution and organization of memory for a parent's life (see Figure 1.2).

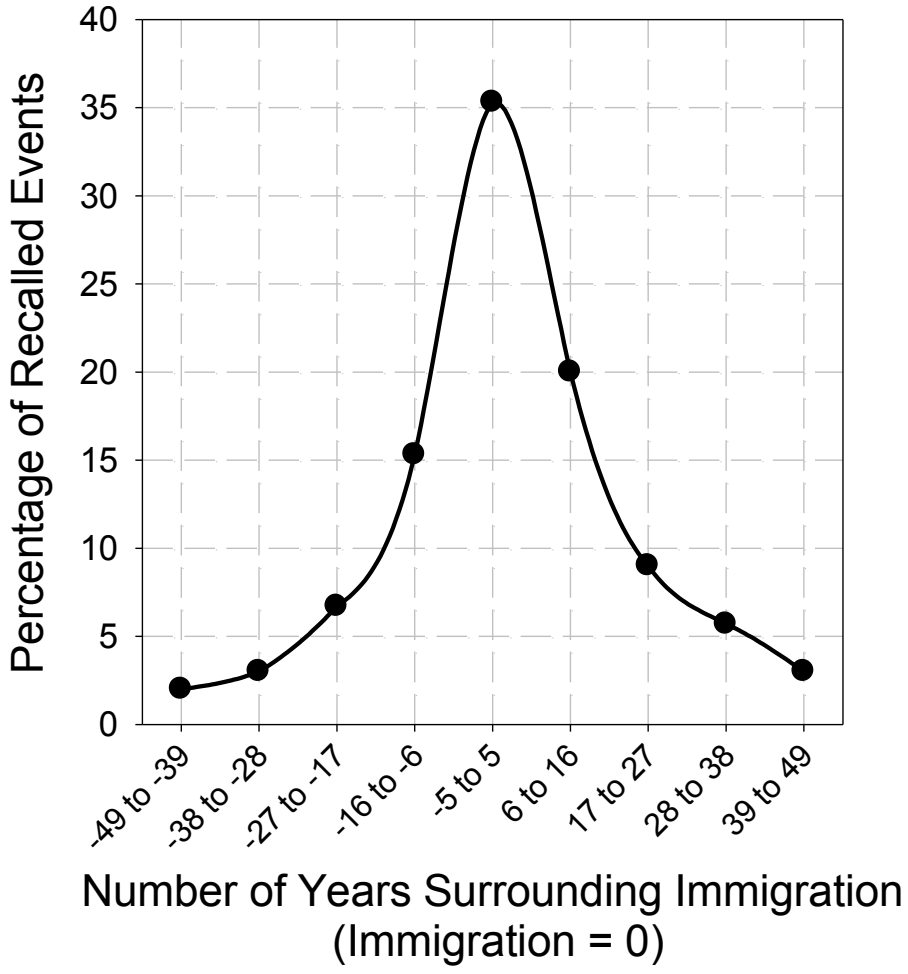

Figure 1.2. Frequency distribution of events surrounding immigration.

The content of the recalled events were analyzed by two independent coders and were grouped into 21 event-type categories with an inter-rater concordance rate of 80.0 % (see Table 1.1). First, 57% of the conflict group's events and 65% of the non-conflict group's events mirrored Berntsen and Rubin's (2004) cultural life script events. There was no statistical difference between the two groups in the types of events recalled ($\chi^2(1) = 0.25$; $p = 0.13$). Nonetheless, there were some qualitative differences. Specifically, 24% of the events generated by the conflict group involved historical events (e.g., ☐*Idi Amin kicks out non-African people*), immigration, military service, or the first return trip to homeland. In contrast, participants in the non-conflict group mentioned no events from these categories. However, they did mention sports events (5%) and dog-related events (1%). The other event types were comparable across groups, suggesting cultural life scripts and certain non-normative events are involved in the retention and selection of important life events.

Table 1.1.

Percentage of Events Recalled as Most Important from a Parent's Life

Event	Conflict Group	Non-Conflict Group
Education/Career*	17%	14%
Immigration	14%	--
Birth of Children*	13%	9%
Death of Family Member*	11%	10%

Marriage*	10%	15%
Historical	5%	--
Children's Accomplishments	5%	4%
Gain/Loss of Possessions	4%	5%
Moving Cities	4%	5%
Return Trip to Homeland	3%	--
Family Related	3%	4%
Military	2%	--
Car Accident	2%	5%
Health – Self*	2%	4%
Health – Other	2%	2%
Big Trip*	1%	7%
Grandchildren*	1%	<1%
Anecdote	1%	6%
Divorce*	<1%	6%
Sports	--	5%
Dog	--	1%

*Cultural Life Script (Berntsen & Rubin, 2004)

In accordance with Transition Theory, the majority of important events recalled from a parent's life were transitions that were perceived to have exerted both psychological and material changes. As per Table 1.2, it is apparent that participants in both groups recognized that important events in their parents'

lives tended to produce change of one form or another, and that these two types of change were understood as being at least partially independent. That is, high degrees of material change tended to correspond to high degrees of psychological change. In contrast, high levels of psychological change did not necessarily produce correspondingly high ratings of material change[1]. This suggests that material change may predict psychological change, whereas psychological change might not be predictive of material change. Further, it implies that it is important to consider both forms of impact when assessing the role of transitions in memory.

Table 1.2

Degree of Perceived Material and Psychological Impact in a Parent's Life

Material Impact	Psychological Impact							
	Conflict Group				Non-Conflict Group			
	None	A little	A lot	Total	None	A little	A lot	Total
None	1%	8%	17%	26%	6%	13%	14%	33%
A little	4%	9%	14%	27%	1%	10%	14%	25%
A lot	<1%	9%	37%	47%	1%	8%	33%	42%
Total	6%	26%	68%		8%	31%	61%	

To examine the mnemonic organization of events from a parent's life, two independent research assistants coded the verbal protocols according to the references and strategies used for determining the date of each event (see Table 1.3). The prevalence of referential events in the dating protocols is used as an

index of the degree to which the events structure and organize memory (Brown, 1990; Brown & Lee, 2010; Brown et al., 2009). The concordance between raters was 89.8%. Discrepancies in the coding were resolved through discussion. The majority of the events relied on calendar knowledge; subjects tended to calculate the estimated year in relation to the current year or a parent's birth date. If calendar knowledge was not used, the major referent was a transitional event (e.g., *that was before my parents got married; that happened when the war broke out*). The loss or gain of material possessions was rarely used to date events, and contemporary cultural references were almost non-existent. Specific to the conflict group, and as predicted by the living-in-history effect, historical references were used to date personal events 5% of the time.

Table 1.3

Percentage of Dating Strategies Used for Estimating Event Dates from a Parent's Life

Dating Strategy	Conflict Group	Non-Conflict Group
Calendar Knowledge (*Age, Birthday*)	59%	65%
Transitions (*Marriage, Immigration*)	34%	33%
Possessions (*House, Car*)	3%	<1%

Contemporary Culture (*Sports, Weather*)	--	<1%
Historical Reference (*War*)	5%	--

To examine the effects of rehearsal (the degree to which events in a parent's life were discussed with the participant), we asked participants how often their parent talked about each event with them. On average, the two groups did not differ on this measure ($t(598) = 0.75$, $p > .05$, $d = 0.06$, 95% CI [-0.07, 0.15]. More specifically, 9% of the events in the conflict group and 10% in the non-conflict group were never discussed. In the conflict-group, 42% were rarely discussed and 47% were frequently discussed; and 45% were both rarely and frequently discussed in the non-conflict group. These figures suggest that the majority of the events recalled as important from a parent's life were, at least at some point, discussed with a parent and that the selection of these events did not rely purely on generic knowledge. Moreover, they suggest that rehearsal may reinforce these events in memory and enhance their perceived importance.

A final issue of interest was the transmission of historical conflict knowledge. Out of the 30 people in the conflict group, 29 mentioned at least one conflict-related event from their parents' lives. More specifically, participants indicated that 25% of the recalled events were directly or indirectly related to an historical event. It is worth noting that only 19% of these historically-related events were experienced directly by the participants (after the age of 8). This

suggests that historical knowledge is vicariously absorbed by children and is transmitted across generations, even when children are removed from the historical events by time, space, and culture. Historical events that impact a parent's life appear to remain particularly salient in a subsequent generation's memory and are understood to have had a personally-relevant, life-altering effect. The finding that a quarter of the important events recalled from a parent's life are conflict-related has implications left to future research on the maintenance of group identity and the persistence of socially-mediated attitudes toward a parent's ethnic out-group in subsequent generations, particularly those not exposed to political conflict and upheaval.

Conclusion

In sum, there are several relevant findings and implications concerning the intergenerational transmission of autobiographical events. First, transitional impact and perceived importance appear to determine which events will be remembered from a parent's life. Second, cultural life script events are prominently featured in a parent's life story, suggesting they may be the predominant form of transition used for selecting and retrieving a parent's important life events (Berntsen & Rubin, 2004). Third, both the distribution and organization of events from a parent's life resemble those observed in autobiographical memory, supporting theories that autobiographical memory and the reminiscence bump are influenced by socio-cultural. Finally, historical conflict knowledge is transmitted across generations and is present in both the distribution and organization of events from a parent's life.

References

Assmann, J. (1995). Collective memory and cultural identity. *New German Critique, 65*, 125-133. doi: http://dx.doi.org/10.2307/488538

Bar-Tal, D. (2007). Sociopsychological foundations of intractable conflicts. *American Behavioral Scientist, 50*, 1430–1453. doi:10.1177/0002764207302462

Berntsen, D., & Rubin, D. C. (2004). Cultural life scripts structure recall from autobiographical memory. *Memory & Cognition, 32*, 427-442.doi:10.3758/BF03195836

Brown, N. R. (1990). Organization of public events in long-term memory. *Journal of Experimental Psychology: General, 119,* 297-314. doi:10.1037//0096-3445.119.3.297

Brown, N. R., Hansen, G. B., Lee, P. J., Vanderveen, S. A., & Conrad, F. G. (In Press). Historically Defined Autobiographical Periods: Their Origins and Implications. In D. Berntsen (Ed.), *Theoretical perspectives on autobiographical memory*.

Brown, N. R., & Lee, P. J. (2010). Public events and the organization of autobiographical memory: An overview of the living in history project. *Behavioral Sciences in Terrorism and Political Aggression, 2,* 133-149. doi:10.1080/19434471003597431

Brown, N. R., Lee, P. J., Krslak, M., Conrad, F. G., Hansen, T. G. B., Havelka, J., &Reddon, J. R. (2009). How war, terrorism, and natural disaster affect

the organization of autobiographical memory. *Psychological Science, 20*, 399-405. doi:10.1111/j.1467-9280.2009.02307.x

Brown, N. R., & Svob, C. (2012). *Collective transitions and the temporal distribution of autobiographical memories*. Unpublished Manuscript.

Conway, M. A. (2005). Memory and the self. *Journal of Memory and Language, 53*, 594-628. doi:10.1016/j.jml.2005.08.005

Duke, M. P., Lazarus, A., & Fivush, R. (2008). Knowledge of family history as a clinically useful index of psychological well-being and prognosis: A brief report. *Psychotherapy Theory, Research, Practice, Training, 45*, 268-272. doi:10.1037/0033-3204.45.2.268

Fivush, R., Bohanek, J. G., & Zaman, W. (2011). Personal and intergenerational narratives in relation to adolescents' well-being. *New Directions for Child and Adolescent Development, 131*, 45-57. doi: 10.1002/cd.288

Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development, 77*, 1568– 1588. doi:10.1111/j.1467-8624.2006.00960.x

Halbwachs, M. (1952/1992). *On collective memory* (L. A. Coser, Trans.). Chicago: The University of Chicago Press.

Hirst, W., & Manier, D. (2008). Towards a psychology of collective memory. *Memory, 16*, 183-200. doi:10.1080/09658210701811912

Janssen, S.M.J., & Murre, J.M.J. (2008). Reminiscence bump in autobiographical memory: Unexplained by novelty, emotionality,

valence or importance of personal events. *Quarterly Journal of Experimental Psychology, 61*, 1847–1860. doi:10.1080/17470210701774242

Kulkofsky, S., Wang, Q., &Koh, J. B. K. (2009). Functions of memory sharing and mother-child reminiscing behaviors: Individual and cultural variations. *Journal of Cognition and Development, 10*, 92–114. doi:10.1080/15248370903041231

Nauck, B. (2001). Intercultural contact and intergenerational transmission in immigrant families. *Journal of Cross-Cultural Psychology, 32*, 159-173. doi:10.1177/0022022101032002004

Pennebaker, J.W., Paez, D., & Rimé, B. (Eds.). (1997). *Collective memory of political events: Social and psychological perspectives.* Hillsdale, NJ: Erlbaum.

Pillemer, D. B. (1998). *Momentous events, vivid memories*. Cambridge, MA: Harvard University Press.

Rubin, D.C., Rahhal, T.A., & Poon, L.W. (1998). Things learned in early adulthood are remembered best. *Memory & Cognition, 26*, 3-19. doi:10.3758/BF03211366

Rubin, D. C., & Schulkind, M. D. (1997). The distribution of autobiographical memories across the lifespan. *Memory & Cognition, 25,* 859-866. doi:10.3758/BF03211330

Schönpflug, U. (2009). *Cultural transmission: Psychological, developmental, social, and methodological aspects.* New York, NY: Cambridge University Press.

Schönpflug, U. (2001). Intergenerational transmission of values: The role of transmission belts. *Journal of Cross-Cultural Psychology, 32,* 174-185. doi:10.1177/0022022101032002001

Schuman, H., Akiyama, H., & Knäuper, B. (1998). Collective memories of Germans and Japanese about the past half-century. *Memory, 6*, 427-454. doi:10.1080/741942611

Tessler, M., Konold, & Reif, M. (2004). Political generations in developing countries: Evidence and insights from Algeria. *Public Opinion Quarterly, 68*, 184-216. doi:10.1093/poq/nfh011

Tomasello, M. (2001). Cultural Transmission: A View from Chimpanzees and Human Infants. *Journal of Cross-Cultural Psychology, 32*, 135-146. doi:10.1177/0022022101032002002

Van Geert, P. (2009). Transmission, self-organization, and the emergence of language: A dynamic systems point of view. In U. Schönpflug (Ed.), *Cultural transmission: Psychological, developmental, social, and methodological aspects* (pp. 48-69). New York, NY: Cambridge University Press.

Footnotes

[1] In the conflict group, 37/47 (79%) of the events that were rated as having produced a lot of material change were also rated as having produced a lot of psychological change. In contrast, only 37/68 (54%) of the events that were rated as having produced a lot of psychological change were also rated as having produced a lot of material change. The same pattern is observed in the non-conflict group: 33/42 (79%) of the events that were reported as having produced a lot of material change were also reported as having produced a lot of psychological change; whereas only 33/61 (54%) of the events scoring high on psychological change had correspondingly high ratings on material change.

Chapter III

STUDY 2 – CHARACTERIZING HISTORICAL AND NON-HISTORICAL EVENTS FROM A PARENT'S LIFE

Abstract

The purpose of this study is two-fold: (1.) to examine characteristics of important historical and non-historical events from a parent's life, and (2.) to better understand their importance for the next generation. We accomplish this by running a 3-Phase paradigm with three groups of young adults, children of: refugees, voluntary immigrants, and Canadians. In Phase 1, participants nominated 10 important events from a parent's life. In Phase 2, they estimated the calendar years of these events and, in Phase 3, provided scale ratings on them. Historic events from a parent's life were greater in their transitional impact on the parent's life and perceived self-relevance for the subsequent generation than non-historic events. Both sets of events demonstrated a positivity bias and were fairly frequently rehearsed. Functionally, important parent-events served self, directive, and social functions for the subsequent generation. Uniquely, the most important functions of historical events were to better understand one's parent and oneself. These findings help us better understand various forms of memory, including autobiographical, vicarious, and historical memory, respectively. Taken together, they provide insight into the properties of important historical and non-historical events that are transmitted across generations, as well as their functions for future generations.

Keywords: intergenerational transmission, autobiographical memory, self-relevance, Transition Theory, memory function, collective memory

Characterizing Historical and Non-Historical Events from a Parent's Life

Exposure to stories is a fundamental and ubiquitous part of human experience. In particular, family stories are important because they provide a basis upon which history may be constructed (Rubin, 1995). Furthermore, family stories contribute to the formation of both individual and group identity (Nauck, 2001), they influence attitudes (Kraaykamp, 2000), impact interpersonal relationships (O'Bryan, Fishbein, & Ritchey, 2004), and transmit historical knowledge (Svob & Brown, 2012). Little is known, however, about the cognitive processes implicated in the selection, retention, and construction of family stories. Moreover, not much is known about the narrative content of family stories that are retained across generations. This leads one to ask: What are the characteristics of important events from a parent's life? And, why are these events considered important?

Over the course of a lifetime, parents may tell their children a substantial amount about themselves and their lives (Duke, Lazarus, & Fivush, 2008; Fiese et al., 1995). Given that children can be exposed to a vast amount of information of this sort, and that some of this information plays a role in people's understanding of themselves and the world around them (Fivush, Bohanek, & Zaman, 2011), it is important to be able to characterize what people know about their parents' lives and to understand why they (the children) retain what they

do. Of course, in the absence of objective information about parents' lives and a detailed record of what is passed from parent to child, we cannot directly examine the factors that predict whether an event description will be remembered or whether the information that is recalled is recalled accurately (a problem that is common to most autobiographical memory studies). Nonetheless, we can collect data that allow us to characterize phenomenal properties of vicarious parental memories and the functional attributes associated with them.

To this end, in the present study we examine the mnemonic aspects and functional properties of both historic and non-historic events that a parent may have experienced. We ground our investigation in the theories and constructs developed to understand important autobiographical memories and attempt to determine (a) the degree to which these approaches predict the characterization of important events from a parent's life, and (b) if, and to what degree, important parental events are self-relevant and/or self-functional to the next generation.

Perspectives in Autobiographical Memory

The autobiographical memory literature suggests that important parental events may possess certain qualities. First, memorable parental events could be driven by their degree of self-relevance to the child. That is, the events may be relevant to the subsequent generation's identity, goals, concerns, and actions (Berntsen & Rubin, 2004; Conway, 2005). The second possibility reflects the organization of autobiographical memory and suggests that the remember-catalogue of important events from a parent's life story is likely to include a fair

number of impactful transitions (i.e., events that caused or marked major material and psychological changes; Brown, Hansen, Lee, Vanderveen, & Conrad, 2012). A third possibility is that important parental events are functionally-relevant to the next generation (Bluck, 2003; Kuwabara & Pillemer, 2010; Rasmussen & Berntsen, 2009). That is, because the recall of certain events can serve varying functions (e.g., providing valuable information for future decision-making), the events may be privileged in memory and in their degree of conceived importance.

In brief, in this article, we seek to understand and disambiguate what makes an event from a parent's life seem important to the next generation and consider the possibilities that subjective importance is based in part on (a) the same attributes that characterize personal memory – i.e., material and psychological impact on the *parent's* life, and/or (b) its self- or functional-relevance to the *child's* life.

Self-Relevance

In generating our predictions, we identify variables and constructs that are known to play a role in autobiographical memory to predict the characteristics of vicarious parental memories. It could be that the subsequent generation's sense of identity (or *self*) is impacted by the events that are considered to be important. Fivush, Bohanek, and Duke (2008), refer to this as the *intergenerational self*. From this perspective, parent-events that are in alignment with one's identity and goals are encoded better and/or are more readily retrieved than those that lack personal relevance. This theoretical

approach is featured strongly, for example, in the Self Memory System (SMS) model of autobiographical memory (Conway, 2005; Conway & Bekerian, 1987; Conway & Pleydell-Pearce, 2000) and is also implicated in how central an event is to one's life story (Berntsen & Rubin, 2006). Basically, if something is evaluated as being self-relevant to the individual recalling the event, retention is thought to be enhanced and recall facilitated.

Echoes of the importance of self-relevance are also observed in memory and learning studies. For example, Symons and Johnson (1997) conducted a review of the research that demonstrates mnemonic superiority for material that is related to the self, suggesting that there are various motivational, affective, and mnemonic consequences that result from the *self-reference effect*. Whether the self-reference effect extends to recalling important events from a parent's life, however, remains unknown.

Transitions

Transition Theory highlights a different aspect of autobiographical memory – its organizational structure. In contrast to theories of self-relevance, Transition Theory posits that transitions primarily drive memory (Brown et al., 2012). A transition is defined as a marked change in the *fabric of daily life* (i.e., a change in frequently encountered people, places, things, or activities). It is an event that brings about (or signals) such a change. Transitional events are likely to be remembered because they often delineate lifetime periods (or, life story chapters; Thomsen & Berntsen, 2008; Thomsen, Pillemer, & Ivcevic, 2001) and thus comprise and structure the life story. Also, they may be associated with

interesting, self-defining transition narratives (e.g., narratives dealing with topics like the parental courtship or a forced migration). Support for this position has been found for both personal and public events (Brown et al., 2009; Brown & Lee, 2010; Brown et al., 2012) and has been extended to memory for events from a parent's life (Svob & Brown, 2012).

Event-cognition research also demonstrates the mnemonic importance of transitions. For example, Avrahami and Kareev (1994) segmented 3-second cartoon clips into random repeated chunks within breaks. Their results suggested that participants learned the subsequence boundaries solely on the basis of their transitional probabilities. Further, Zacks, Speer, Swallow, Braver, and Reynolds (2007) have examined the role of event boundaries in memory, demonstrating that material presented around an event boundary is remembered better than material presented during non-boundary periods. According to event segmentation theory (Swallow, Zacks, & Abrams, 2009), mental representations of events are updated whenever change occurs. As such, transitions are implicated in various forms of memory and cognition regardless of whether they correspond to a person's sense of self. Clearly, in these studies, identity was not a necessary or determinant factor of memory. The extent to which transitions play a role in the recall of important parent-events, however, remains open to further investigation.

Memory Functions

The functional aspects of memory could also contribute to the selective retention of important events across generations. According to the functional

approach, it is assumed that different classes of memories serve different functions. The functions relate to real-world usefulness and assume an adaptive significance to remembering various events (Rasmussen & Berntsen, 2009). The functional approach has predominantly converged on three functions: self, social, and directive (Bluck, 2003; Bluck, Alea, Habermas, & Rubin, 2005; Cohen, 1998; Pillemer, 1992). Although not exhaustive (cf. Rasmussen & Habermas, 2011), nor necessarily discrete (Alea & Bluck, 2003), the three broad categories help explain how different types of event memories differ from one another.

The self has been assigned several functions, including: grounding a self-concept (Baddeley, 1988), maintaining a sense of personal-continuity over time (Bluck et al., 2005; Conway, 2005), and facilitating memory retrieval through goal-directed and purposeful rehearsal (Berntsen & Rubin, 2006). The social functional aspects suggest the function of autobiographical memory is to maintain and develop relationships (Nelson, 1993). As such, the social component of sharing family stories may be an inherent aspect of vicarious parent memory. Finally, the directive function serves to aid decision-making, facilitate problem-solving, and guide planning (Bluck et al., 2005). This class of event memories can also inspire, inform, and motivate future actions (Kuwabara & Pillemer, 2010) for both positive and negative events, but may be more prominent in the case of negative events (Rasmussen & Berntsen, 2009). The potential directive function of retaining parent-events is of particular importance in the case of historical events, such as political injustices. If a parent has

experienced negative effects as a result of war, for example, it is possible that the parent's experience will serve to direct the decisions, behaviors, and attitudes of his or her children.

Overview

In the present study, we investigate potential characteristics of important parent-events according to their transitional impact, their effects on identity, and their functions. To this end, we examined the intergenerational transmission of important parent-events. Specifically, in Phase 1 we asked adult children of refugees, immigrants, and Canadians to report the 10 most important events from a parent's life. In Phase 2, participants estimated the dates of the events reported in Phase 1. And, in Phase 3, we collected ratings on the ways the events have impacted both the parent's and the participant's lives. Given these data, we could then examine the extent to which important events from a parent's life are transitional (i.e., characterized by material and psychological change), self-relevant, and self-functional.

The present study is an extension of a study conducted by Svob and Brown (2012) that investigated the intergenerational transmission of important life events in adult children of parents who lived through violent political upheaval and those that did not. The study yielded several new findings. First, it demonstrated that memories across generations can be studied in a systematic, quasi-experimental way. Second, it indicated that the *reminiscence bump* (i.e., the preferential recall of events from the ages of 15-30; Fitzgerald & Lawrence, 1984; Rubin, Rahhal, & Poon, 1998) crossed generations. That is, the robust

phenomenon observed in the temporal distribution of autobiographical memory was also observed in memory for a parent's life. Third, the findings suggested that the recalled events were primarily transitions (i.e., the events were perceived to have produced high degrees of material and psychological change). Fourth, the transition of immigration to Canada produced an *immigration bump* in the temporal distribution of important life events. Finally, 25% of the events reported by the conflict group were related to historical conflict-knowledge. Overall, the study suggested that people remember and reference major changes when reporting important past events.

In the present study we set out to replicate and extend Svob and Brown's (2012) major findings. We accomplished this by running the same paradigm with three groups of young adults: children of refugees, immigrants, and Canadians. We added the immigrant group to test the impact of transitions on memory. According to Transition Theory (Brown, et al, 2012; Svob, Brown, Reddon, Uzer, & Lee, 2013), life events produce varying degrees of material and psychological change. For major transitions, like immigration, a high degree of change is expected. Further, if immigration is forced, as opposed to voluntary, it creates more dramatic and severe ruptures and changes to a person's life – especially, when people are forced to flee for their lives (Malkki, 1995; Mollica et al., 1992). If this extends to the recall of events from a parent's life, an *immigration bump* should be observed in both groups of immigrants and refugees, but might be attenuated in the immigrant group. Further, no group

differences are expected in the temporal distribution of events, unless one group has experienced more transitions in a certain decade of life.

Method

Participants

Eight-seven undergraduates enrolled in Introductory Psychology courses at the University of Alberta participated in the study in exchange for partial course credit. The participants were selected randomly from three pools, one consisting of parents who (a) immigrated because of war (Refugees), (b) for reasons other than war (Immigrants), or (c) their parent did not immigrate (Canadians). Rather than basing the group assignment on country of origin, each participant was asked to rate the degree to which their parent's *immigration* was related to a public, historical event (1 = *not at all*; 5 = *completely*). A rating of 4 or 5 was required for individuals to belong to the refugee group, and a rating of less than 4 was required to belong to the immigrant group. This was to ensure the refugees were indeed refugees and not voluntary immigrants to Canada, and vice versa. As such, a participant whose parent emigrated from, for example, Lebanon, to escape violent political upheaval would be classified as a refugee, whereas another participant whose parent emigrated from Lebanon to attend medical school in Canada would be classified as an immigrant.

The refugee group was composed of 29 young adults (20 females, 9 males; mean age = 19.0 years, *SEM* = 0.27) whose parents had immigrated to Canada as refugees from countries that experienced periods of violent political upheaval, including Afghanistan, Bosnia, Croatia, El Salvador, Grenada,

Guyana, Iran, Iraq, Lebanon, Nigeria, Poland, Russia, Serbia, Somalia, South Africa, Sri Lanka, Sudan, Tanzania, Uganda, and Uzbekistan. The second group was composed of 29 young adults (23 females, 6 males; mean age = 19.2 years, *SEM* = 0.29) whose parents had immigrated to Canada voluntarily and not as refugees from various countries, including Columbia, the Congo, England, Germany, Ghana, Guyana, Iran, Iraq, Ireland, Kenya, Lebanon, Nigeria, Pakistan, Poland, Romania, Scotland, Serbia, and Sweden. The final group was composed of 29 young adults (24 females, 5 males; mean age = 19.5 years, *SEM* = 0.37) whose parents were born and raised in Canada.

Procedure

All participants provided written informed consent and received partial course credit for their participation. Participants were run individually on an in-lab computer. There were three phases in the study. In Phase 1, participants were asked to nominate the 10 most important events in one of the parents' lives. Participants were told that the events could be from any point in their parent's life, from their birth to the present. Two restrictions, however, were imposed: (a) Unless there was something distinct about the birth of a child, participants were asked to limit the birth of children to a single event, and (b) participants were requested to refrain from reporting their parent's birth as one of the events.
In Phase 2, the events reported in Phase 1 were re-presented individually and in random order on a computer screen. Participants were asked to estimate the calendar year of each event.

Phase 3 (see Appendix) was also computer administered. Events from Phase 1 were re-presented randomly once again. This time, several scale items were presented simultaneously for each event. The items were divided into two sections. In the first section, participants rated the degree to which they perceived each event to have impacted their *parent's life*. The items included the belief that the event changed their parent's external material circumstances, that the event impacted their parent psychologically, the degree to which each event was important, positive/negative, talked about, and related to a public, historical event.

In the second section of Phase 3, participants again rated the events from the parent's life, but this time they were asked to report the degree of impact each event had on their *own life*, instead of their parent's. On a 5-point scale, participants rated the degree to which they agreed that each event impacted their own sense of identity, became a reference point for the way they understand themselves and the world, is a part of their own life story, and colors the way they think and feel about other experiences. These items were adapted from Berntsen and Rubin's (2006) Centrality of Event Scale. The remaining items related to potential functions of memory for a parent's life, including the degree to which the reported events impacted the participant's life decisions, helped them to better understand their parent, and influenced their relationships with others.

Results and Discussion

On average, the groups were comparable on parental age: Refugees 49.6 (*SEM* 0.27) years, Immigrants 50.4 (*SEM* 0.29) years, and Canadians 49.8 (*SEM* 0.37) years, $F(2, 84) = 0.44$, $p = .65$. Average parent's age at time of immigration was also similar between groups: Refugees 25.8 years; Immigrants: 31.2 years ($t(52) = -1.53$, $p = .13$, $d = -0.42$, 95% CI [-12.33, 1.67]). Participants chose to report events from both parents' lives relatively equally, with a slight preference for their mother: In the refugee group 51.7% chose their mother, in the immigrant group 55.2%, and in the Canadian group 65.5%.

To examine the properties of important events recalled from a parent's life, we focused on two primary characteristics of event memory: (a) self-relevance and (b) transitions. A measure of self-relevance was calculated from the mean rating given to the item: *This event has become a part of my identity, of who I consider myself to be*. The omnibus measure of transitional impact was averaged from the two items: *To what extent did this event impact your parent's external material circumstances (the people, places, things, and activities in your parent's daily life)? To what extent did this event impact your parent psychologically (e.g., their attitudes, beliefs, emotions)?*

Mean measures of self-relevance for the nominated events were relatively high and differed significantly across groups, $F(2, 84) = 3.46$, $p = .036$, 95% CI [3.11, 3.39], with Immigrants reporting greater degrees of self-relevance than Canadians, $t(56) = 2.76$, $d = 0.74$, $p = .008$ (see Table 1). The Immigrants and Refugees were comparable on self-relevance ($t(56) = -1.07$, $d =$

-0.29, p = .291), as were Refugees and Canadians (t(56) = 1.49, d = 0.40, p = .141). This suggests that if an event from a parent's life is even moderately relevant relative to the subsequent generation's sense of identity, it is likely to be conceived of as important. This is consistent with the self-reference effect (Symons & Johnson, 1997) and Conway's (2005) Self-Memory System. It suggests that the intergenerational transmission of a parent's life story indeed impacts the subsequent generation's identity. Moreover, it supports the possibility that the selection and retention of important events across generations is influenced by the degree to which events are consistent with the next generation's sense of self – with their concerns, goals, and motives. The fact that Immigrants reported significantly greater degrees of self-relevance than Canadians will be discussed further below.

Transitional impact ratings were consistently high across the three groups, F(2, 84) = 0.06, p = .94, 95% CI [3.79, 4.01] (see Table 2.1). This suggests that transitions play a major role in the events that are conceived of as important in a parent's life. Furthermore, transitions appear to hold a privileged place in memory across generations. This is consistent with Svob and Brown's (2012) finding that major transitions impact the intergenerational transmission of a parent's life story.

Table 2.1

Mean (Standard Error) Ratings (5-point Scale) of Self-Relevance and Transitions for Important Events Recalled from a Parent's Life by Adult Children of Refugees, Immigrants, and Canadians

	Refugees	Immigrants	Canadians	Total
Self-Relevance	3.27 (0.09)	3.46 (0.09)*	3.01 (0.09)*	3.25 (0.05)
Transitions	3.88 (0.06)	3.92 (0.06)	3.92 (0.06)	3.90 (0.04)
Material Change	3.92 (0.08)	3.86 (0.08)	3.94 (0.07)	3.91 (0.04)
Psychological Change	3.83 (0.07)	3.98 (0.07)	3.90 (0.06)	3.90 (0.04)

* $p < .05$

Rehearsal and Valence

In addition to transitions and self-relevance, there are two major features of autobiographical memory that are believed to contribute to recall: rehearsal and valence. Rehearsal is the degree to which events are thought or talked about. The more events are rehearsed, the greater the likelihood they will be available for later retrieval (Walker, Skowronski, Gibbons, Vogl, & Ritchie; 2009). Further, a positivity bias is often observed in temporal distributions of memory, suggesting people tend to experience and recall more positive than negative events (Berntsen & Rubin, 2002). These same effects appeared in our examination of memory for a parent's life. Mean rehearsal ratings were relatively high and uniform across the three groups ($F(2, 84) = 0.72$, $p = .490$, 95% CI [3.40, 3.65]): Refugees ($M = 3.61$, $SEM = 0.07$), Immigrants ($M = 3.43$, $SEM = 0.08$), Canadians ($M = 3.54$, $SEM = 0.07$). This suggests that many events

that are known from a parent's life were at one time shared with the child and, through their retelling, created a greater degree of perceived importance.

Valence ratings were also relatively high and consistent across groups ($F(2, 84) = 0.59$, $p = .555$, 95% CI [3.73, 3.98]): Refugees ($M = 3.77$, $SEM = 0.09$), Immigrants ($M = 3.86$, $SEM = 0.09$), and Canadians ($M = 3.94$, $SEM = 0.09$). This suggests that a positivity bias exists for important events from a parent's life, just as it might for one's own. Taken together, the more rehearsed and positive events are perceived to be in a parent's life, the more likely they will be considered important by the subsequent generation.

Historical and Non-Historical Events

To examine whether historical and non-historical events differed in degrees of self-relevance and transitional impact, we compared the two types of events within subjects (see Table 2.2). Historical events were coded as historical if they were given a rating of 4 or 5 to the question: *To what extent was this event related to a public historical event (e.g., war)?* For ratings of 3 or less, the events were coded as non-historical.

Historical events were rated significantly higher on both self-relevance ($t(50) = -3.20$, $d = 0.65$, $p = .002$) and transitional impact ($t(50) = -2.28$, $d = -0.39$, $p = .027$) than were non-historical events. Living through historical events was perceived to have been a life-altering experience for the participants' parents. Moreover, the historical events impacted the next generation's sense of identity, despite them not having been exposed to the wars and political conflicts.

The rehearsal ratings between the two types of events did not differ ($t(50) = -0.57$, $d = -.10$, $p = .58$), suggesting historical events are not discussed any more frequently than non-historical events. Finally, the historical events were rated as having similar levels of positive valence as other important non-historical events ($t(50) = 0.90$, $d = 0.17$, $p = .37$). Taken together, historical events appear to exert greater degrees of material and psychological impact on the parent's life than do non-historical events. Further, historical events from a parent's life impact the next generation's sense of identity more than non-historical events. Nonetheless, historical and non-historical events appear to resemble one another in the degree to which they possess a positivity bias and in the degree to which they are discussed and rehearsed with the next generation.

Table 2.2

Mean (Standard Error) Ratings (5-point Scale) for Properties of Historical and Non-Historical Events from a Parent's Life

	Historical	Non-Historical
Self-Relevance	3.73 (0.16)*	3.21 (0.10)
Transitions	4.08 (0.13)*	3.79 (0.08)
Rehearsal	3.54 (0.15)	3.45 (0.09)
Valence	3.69 (0.15)	3.84 (0.09)

* $p < .05$

Functions of Remembering a Parent's Life

As already noted, there are three basic functions attributed to autobiographical memory: self, social, and directive. To examine whether the

functions of autobiographical memory extend to memory for a parent's life, we adapted scale items to address the potential functions. Specifically, the self function was derived from the item that was previously used to assess self-relevance: *This event forms a part of my identity, of who I consider myself to be*. The directive function measure was obtained from the item: *This event impacts my life decisions*. And, the social function was divided into two components, social relations with others (*This event influences the relationships I have with others*) and social relations with one's parent (*This event helps me to better understand my parent*).

As reported earlier, the Immigrants rated their parent's life events as serving the self function significantly higher than the Canadians ($t(56) = 2.76$, $d = 0.74$, $p = .008$), while Refugees and Canadians were comparable to each other, as were Immigrants and Refugees (see Table 2.3). There were no group differences concerning the directive function between groups ($F(2, 84) = 1.88$, $p = .16$, 95% CI [2.59, 2.91]), nor the social function for better understanding one's parent ($F(2, 84) = 2.69$), $p = .07$, 95% CI [3.60, 3.86]). There was, however, a group difference on the social function for relating to others: Immigrants scored significantly higher than both Refugees ($t(56) = -3.04$, $d = -0.81$, $p = .004$) and Canadians ($t(56) = 2.15$, $d = 0.58$, $p = .036$), respectively, whereas Refugees and Canadians remained similar to one another ($t(56) = -0.72$, $d = -0.19$, $p = .48$).

The Immigrants differed from the other two groups on the functions their parent's life events served in their lives. This group difference was unexpected

and will be discussed further below. For now, it is worth noting that children of immigrant parents appear to have their sense of identity interwoven more with their parents' lives than do children of non-immigrant parents. Further, the important events in their parents' lives impact their relationships with other people significantly more than they do for children of refugees and Canadians, respectively. Further research could explore why this might be the case. It is possible that measures of ethnic identity (e.g., Noels, Pon, & Clément, 1996; Phinney, 1990) could account for this finding. For example, it could be that children of immigrants identify more with their parent's ethnicity, whereas children of refugees try to assimilate more to their host country's culture, while children of Canadians take their ethnic identity for granted.

The average scores on the various functions when collapsed across groups were all significantly different from each other (all ps < .001). According to our data, the most important function of remembering particular events from a parent's life is to better understand a parent and oneself. To a lesser extent, parental events also influence the next generation's life choices and impact relationships they have with other people. The functions of remembering a parent's life hold some important implications. Notably, they suggest that a parent's life story influences the next generation in various ways. This may be especially important when considering historical events that perpetuate inter-ethnic conflict across generations. The sins of the father may indeed reverberate across generations. Further research is needed in this area to better understand

how and under what conditions historical events impact a subsequent generation's identity, choices, and relationships.

Table 2.3

Mean (Standard Error) Ratings of Functions (5-point Scale) across Children of Refugees, Immigrants, and Canadians

Function	Refugees	Immigrants	Canadians	Total
Self				
Identity	3.27 (0.09)	3.46 (0.09)*	3.01 (0.09) *	3.25 (0.05)
Directive				
Life Decisions	2.61 (0.09)	2.97 (0.09)	2.68 (0.08)	2.75 (0.05)
Social				
Understand Parent	3.79 (0.07)	3.87 (0.07)	3.52 (0.07)	3.73 (0.04)
Other Relationships	2.21 (0.08)	2.71 (0.09)*	2.32 (0.08)	2.41 (0.05)

* $p < .05$

To examine whether historical and non-historical events differ in their functions, we compared the two sets of events (see Table 2.4). The two differences between historical and non-historical events were the self function and the (social) function of better understanding one's parent. If a parent lived through history (e.g., war), the parent's experiences influenced the subsequent generation's sense of identity ($t(50) = -3.20$, $d = 0.65$, $p = .002$) and enhanced the next generation's perceived sense of understanding their parent to a greater extent than did non-historical events ($t(50) = -2.98$, $d = -0.53$, $p = .004$). Historical events *per se* did not, however, significantly impact the next

generation's life decisions or relationships with other people any more than non-historical events.

Table 2.4

Mean Ratings (Standard Error) of Functions for Historical and Non-Historical Events from a Parent's Life (5-pt Scale)

	Historical	Non-Historical
Self	3.73 (0.16)*	3.21 (0.10)
Directive	2.73 (0.17)	2.63 (0.10)
Social – Understand Parent	4.09 (0.12)*	3.68 (0.09)
Social – Relationships with Others	2.45 (0.16)	2.31 (0.09)

* $p < .05$

Taken together, we can surmise that the functions of remembering a parent's life are similar to those of autobiographical memory (i.e., they serve self, directive, and social functions). The transmission of life events from one generation to the next serves to strengthen the next generation's sense of identity, informs major decisions in their lives, impacts their interpersonal relationships, and increases their understanding of the generation from which they follow. Moreover, these factors likely contribute to the cognitive processes implicated in determining which events are considered important and worthy of retention across generations.

Temporal Distribution of Events

The estimated temporal distributions of important events from a parent's life were plotted to determine if our data would replicate the temporal

distribution observed in Svob and Brown's (2012) study (see Figure 2.1). Only two of the three groups (Refugees and Canadians) appeared to produce a reminiscence bump, yet statistically, the distributions did not differ between the three groups, $\chi^2(4) = 6.0$, $p = .20$. As such, the distributions of the events estimated for various decades of a parent's life were not significantly different across the three groups and were fairly equally distributed across the various decades of the parent's life. Nonetheless, a greater proportion of events were reported during the reminiscence bump period (15 – 30 years of age) for Refugees and Canadians, replicating Svob and Brown's findings.

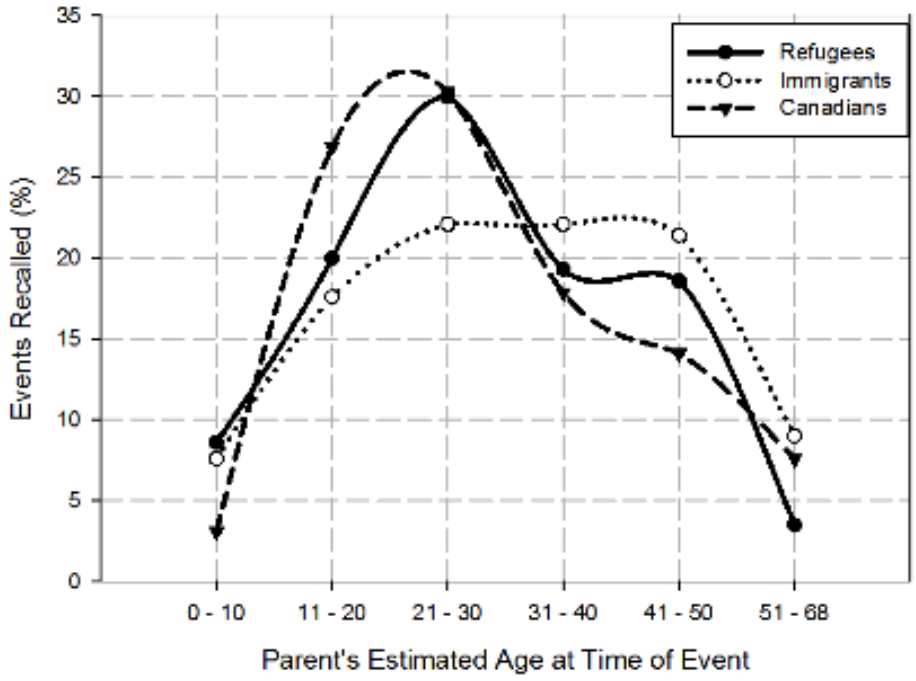

Figure 2.1. Distribution of events that children recalled from one of their parents' lives as a function of the parent's estimated age at the time of the event and group type.

There are several possible explanations for why the events from a parent's life might be distributed fairly evenly across various decades of life. For one, according to Transition Theory, the reminiscence bump is not age dependent (Brown, Schweickart, & Svob, 2014). Rather, it is structured and organized primarily by transitional events with the understanding that transitional events can occur at any point in the life span. As such, an attenuated or precluded reminiscence bump should not be surprising. Another reason a reminiscence bump may not be prominent across generations is that adult children may be able to more easily recall important events from a parent's life that overlap with their own lifetime. As such, there may be a distortion in the temporal distribution that favors events from the time the participants were born. Such a bias may smear events from the reminiscence bump into the decades of the participant's lives.

Are Children of Immigrants Unique?

We now return to the issue of group differences in self-identity and functionality for the Immigrant group. The possibility that children of immigrants perceive and integrate their parent's important life events differently than children of refugees and Canadians is intriguing. As previously noted, there were no significant group differences according to demographics (e.g., age, gender). Further, as noted above, the Immigrant Group rated events from their parent's life as influencing their sense of self significantly higher than the Canadian group, but not the Refugee group. There were no group differences on the rated transitional impact of recalled events; all groups provided high

transition ratings. The only difference between Immigrants and both Refugees and Canadians was the degree to which important events from their parent's life functioned to influence their interpersonal relationships, and yet, even this rating was moderate. Taken together, this suggests that children of immigrants are unique only in that they appear to internalize their parents' lives to a greater extent than non-immigrant children.

To examine the possibility that children of immigrants interweave their parent's life story with their own to a greater extent than do children of refugees and Canadians, we examined the degree to which events from a parent's life might be central to the subsequent generation's life story. This was accomplished by adapting items from Berntsen and Rubin's (2006) Centrality of Event Scale (CES). To this end, we calculated an averaged score for the items: *This event has become a part of my identity; This event has become a reference point for the way I understand myself and the world; This event has become a part of own life story; This event has colored the way I think and feel about other experiences* (see Table 2.5). Overall, the immigrant group differed from the Canadians on the CES, $t(56) = 2.67$, $d = 0.71$, $p = 0.10$, but not from the Refugees, $t(56) = -1.54$, $d = -0.41$, $p = .13$. Further, Refugees and Canadians were comparable on the CES, $t(56) = 0.88$, $d = 0.24$, $p = .39$. This suggests that children of immigrants are more likely than Canadians to adopt important events from their parents' lives as a part of their own life story. Interestingly, children of refugees resemble both children of immigrants and Canadians in the degree to which they interweave events from a parent's life story with their own.

Table 2.5

Mean (Standard Error) Ratings (5-point Scale) of Centrality of Events (CES) Measures for Parent-event's by Adult Children of Refugees, Immigrants, and Canadians

	Refugees	Immigrants	Canadians	Total
Part of Identity	3.27 (0.09)	3.46 (0.09)*	3.01 (0.09)*	3.25 (0.05)
Reference Point	2.78 (0.09)	2.92 (0.09)**	2.59 (0.08)**	2.77 (0.05)
Part of Life Story	2.84 (0.10)	3.22 (0.09)*	2.85 (0.10)*	2.97 (0.06)
Influence Other Experiences	2.77 (0.08)	3.12 (0.08)*	2.63 (0.08)*	2.84 (0.05)
CES (Total)	2.91 (0.08)	3.18 (0.08)*	2.77 (0.07)*	2.96 (0.04)

* $p < .05$, ** $p = .054$

Taken together, children of immigrants constituted a unique group. As one might expect, they resembled the children of refugees to a greater extent than the children of Canadians. Yet, the Refugees and Canadians were more similar to each other than they were to Immigrants. The cultural heritages of the participants were relatively well balanced between the Immigrant and Refugee groups, so cultural variation is unlikely to explain this difference. This is an interesting finding that merits further investigation that is beyond the scope of this paper. Nonetheless, we can speculate that children of immigrants differ from children of refugees and Canadians in that they may have been told that their parents immigrated so that they could have better opportunities than their parents

had. That is, the parents immigrated and changed their lives for them – their children. Conversely, refugees immigrated because of the dangers imposed by war, not specifically for the sake of their children. Further, Canadians tend to have children as an expected part of the cultural life script, not because there is necessarily something special about the given children. As a result, children of immigrants may internalize their parents' lives in a special way. They may vicariously absorb their parents' desires and live them out in their own lives because their parents sacrificed a part of their own lives for them. Further research is needed to explore this possibility, but the possibility remains intriguing.

Immigration Bump

In addition to the temporal distribution of events from a parent's life, we predicted an immigration bump for both the refugee and immigrant groups, respectively. Svob and Brown (2012) observed a bump for events that centered around the parent's transition of immigration to Canada. This provided support for Transition Theory, suggesting memory is organized around major transitions. Similarly, we plotted all of the reported events from the parents' lives and observed a similar bump for children of refugees, and a slightly less robust bump for the children of immigrants (see Figure 2.2). Pairwise comparisons using the Kolmogorov-Smirnov test revealed that the distributions between Refugees and Immigrants were comparable ($p = .69$), suggesting the pattern of results is the same – both groups exhibit an immigration bump. Further, the graded difference between the two groups was predicted by Transition Theory given that

transitions come in varying degrees. As such, one might assume that, on average, fleeing a country as a refugee results in a more dramatic and disruptive transition than does planned immigration. Further, the greater the impact of a given event, the higher the likelihood that it will serve as a structural marker in the recall and creation of a life story. Again, these bumps support the notion that major transitions help structure the way life stories are remembered. It should be noted that the average age of immigration (as reported earlier) falls within the reminiscence bump period and is conflated with the formative years. Nonetheless, the fact that this single event creates such a pronounced curve in the distribution of biographical events is worth noting.

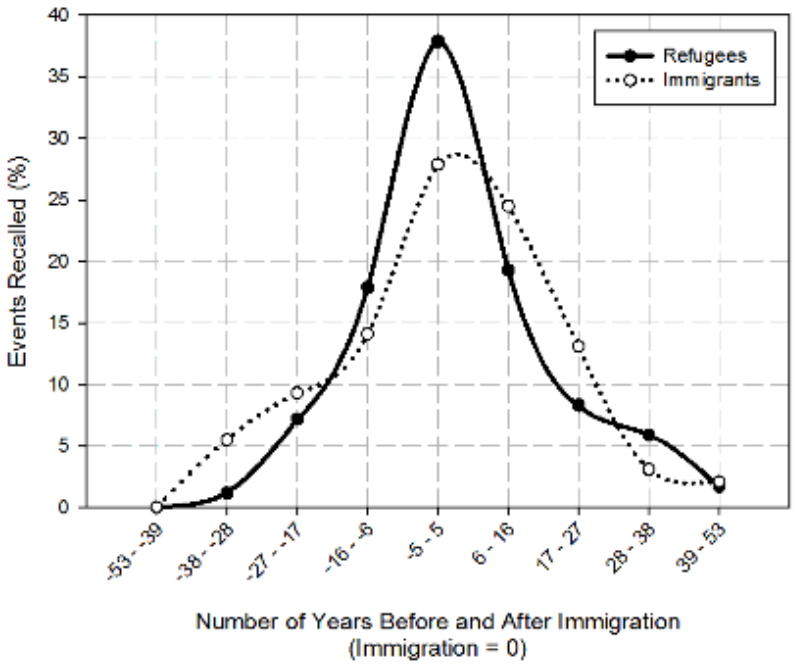

Figure 2.2. Distribution of events that children recalled from one of their parents' lives as a function of the number of years before and after the parent immigrated as a refugee or voluntary immigrant.

Types of Events

Two independent research assistants coded the events recalled by the participants from their parents' lives, with an inter-rater concordance of 92% (see Table 2.6). The event categories were similar to the categories reported in Svob and Brown (2012), with the addition of religious events and events related to a significant relationship (precluding family). Again, almost two-thirds of the events were cultural life-script events reported by Berntsen and Rubin (2004): Refugees (56.4%), Immigrants (67.0%), and Canadians (61.2%). Non-normative events reported by all three groups included, *family-related events*, *moving cities*, *children's successes and accomplishments*, *the loss or gain of possessions*, *military service*, and *car accidents*. Finally, there were event types reported by two groups that were lacking in the third. Canadians, unsurprisingly, failed to report *immigration to Canada*, *a return trip to one's homeland*, or any *historical events*. The children of immigrants did not report any *anecdotal events*. And, the children of refugees excluded mention of *religious*, *sport*, and *dog-related* events. As a result, the distribution of event types was significantly different across the three groups (χ^2 (46, N = 870) = 112.25, p < .001).

Table 2.6

Distribution of Events Recalled by Children of Refugees, Immigrants, and Canadians as Being Most Important in a Parent's Life

Type of Event	Refugees	Immigrants	Canadians
Education/Career*	18.8%	19.4%	20.7%
Immigration	11.6%	8.8%	---

Death in Family*	10.8%	8.5%	10.7%
Child Birth*	10.4%	10%	11%
Marriage*	9.2%	8.8%	9.0%
Family Related	5.6%	6.1%	5.2%
Moving (Cities, Houses)	4.0%	3.3%	7.2%
Historical Reference	3.6%	<1%	---
Gain or Loss of Possessions	3.6%	3.3%	3.8%
Children's Accomplishments	3.2%	4.6%	3.8%
Significant Relationship	2.4%	2.7%	7.9%
Health – self*	2.4%	3.6%	3.8%
Trip/Vacation*	2.0%	4.2%	3.5%
Divorce*	1.6%	2.1%	2.1%
Health – other	1.2%	1.5%	2.1%
Military Service	1.2%	1.2%	<1%
Grandchildren*	1.2%	<1%	<1%
Anecdote	1.2%	---	1.4%
Return Trip to Homeland	1.2%	1.2%	---
Car Accident	<1%	<1%	1.0%
Sports	---	1.8%	2.1%
Dog	---	<1%	<1%
Religion	---	<1%	1.0%
Other	4.4%	5.2%	1.0%

* Cultural Life Script Events (Berntsen & Rubin, 2004)

Transmission of Historical Knowledge

A final point of interest concerned the transmission of historical conflict knowledge. Participants were asked to rate the degree to which each reported event from their parent's life was related to a public historical event and, if it was related, to name the event. The children of refugees reported 24% of the events as being related to a public historical event, namely, violent political upheaval. This is consistent with findings from Svob and Brown (2012) where 25% of the events in the Conflict group were historically-related. Also, consistent with Svob and Brown's findings, Canadians failed to report any historical events from their parents' lives. Interestingly, although the immigrant group's parents did not immigrate due to violent political tensions, 10% of the events from their parents' lives were, nonetheless, perceived as being historically-related. These events primarily concerned the fall of communism or economic turmoil. This is of particular interest as the Living-in-History effect (Bernstein, Nourkova, & Loftus, 2008; Nourkova & Brown, 2014) was not observed for people who lived through the fall of communism in Russia, and economic hardships were rarely conceived of in historical terms in the first generation. This suggests that contextualizing personal events within a historical framework may skip a generation and may be more pronounced in the next.

Conclusion

We conducted a study to better understand the characteristics of events that are remembered from a parent's life. Specifically, we examined three different aspects of memory: self-relevance, transitions, and functions in three

groups of young adults (children of refugees, immigrants, and Canadians). We found that self-relevance was implicated in the events reported by all three groups, but significantly more so for Immigrants than for Canadians. Further, the recalled events were predominantly transitional across all groups, suggesting transitional events benefit from a form of privileged encoding even when they are experienced vicariously. Additionally, important events from a parent's life received high ratings of rehearsal and demonstrated a positivity bias.

The functional analysis indicated that the most significant functions of remembering important events from a parent's life were to better understand one's parent and to better understand oneself. Additionally, although to a lesser extent, recalling important events from the life of a parent impacts a subsequent generation's life decisions and influences their inter-personal relationships. Our examination of historical and non-historical events revealed that historical events were unique in several respects. First, historical events impacted the next generation's sense of identity to a greater extent than did non-historical events. Second, historical events were perceived to have greater transitional impact on the parents' lives than did non-historical events. Third, historical events served unique functions. Specifically, they served to help the next generation better understand their parents, as well as themselves.

In addition to these aspects of memory, we replicated Svob and Brown's (2012) findings of the intergenerational transmission of a reminiscence bump in the temporal distribution of memories. This effect, however, was attenuated in the immigrant group and suggested that the events from a parent's life may be

more evenly distributed across a parent's life from the perspective of an adult child. Moreover, we replicated and extended Svob and Brown's finding of an immigration bump across generations for both Refugees and Immigrants. Again, this finding supports the notion that major life transitions organize memory. Finally, we discovered similarities and differences between the three groups in the types of important events that were reported from a parent's life. For the most part, the events conformed to cultural life script events (Berntsen & Rubin, 2004), but also included some non-normative nuances. For example, 24% of the events reported by Refugees and 10% of the events nominated by Immigrants were historical.

Taken together, our data provide important information for better understanding the interplay between autobiographical memory, vicarious memory, and historical memory. The degree to which events from an older generation are perceived as important to the younger generation is likely to play a role in the events that are successfully transmitted. Also, major transitions (especially those that are positive and rehearsed frequently) are likely candidates for intergenerational transmission. Our data further suggest that important parental events impact the next generation's identity, life decisions, and personal relationships. Thus, this study provides a foundation upon which further research may be conducted, including studies related to the formation of historical and collective memory, as well as the impact of a parent's life story on the thoughts and attitudes of the next generation.

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. doi:10.1080/741938207

Atran, S. (2001). The trouble with memes: Inference versus imitation in cultural creation. *Human Nature, 12*, 351-381. doi:10.1007/s12110-001-1003-0

Avrahami, J., & Kareev, Y. (1994). The emergence of events. *Cognition*, *53*, 239-261. doi:10.1016/0010-0277(94)90050-7

Baddeley, A. (1981). The concept of working memory: A view of its current state and probable future development. *Cognition*, *10*, 17-23. doi:10.1016/0010-0277(81)90020-2

Baddeley, A. (1988). But what the hell is it for? In M. M. Gruneberg, P. E. Morris, & R. N. Sykes (Eds.), *Practical aspects of memory: Current research and issues* (Vol. 1, pp. 3-18). Chichester, UK: Wiley.

Bernstein, D.M., Nourkova, V., & Loftus, E.F. (2008). From individual memories to oral history. In A.M. Colombus (Ed.). *Advances in Psychology Research, 54*, 157-181. Nova Science Publishers.

Berntsen, D., & Rubin, D. C. (2002). Emotionally charged autobiographical memories across the lifespan: The recall of happy, sad, traumatic, and involuntary memories. *Psychology and Aging, 17*, 636-652. doi:10.1037/0882-7974.17.4.636

Berntsen, D., & Rubin, D. C. (2004). Cultural life scripts structure recall from autobiographical memory. *Memory & Cognition, 32*, 427-442. doi:10.3758/BF03195836

Berntsen, D., & Rubin, D. C. (2006). The centrality of event scale: A measure of integrating a trauma into one's identity and its relation to post-traumatic stress disorder symptoms. *Behaviour Research & Therapy, 44*, 219-231. doi:10.1016/j.brat.2005.01.009

Bluck, S. (2003). Autobiographical memory: Exploring its functions in everyday life. *Memory*, *11*, 113-123. doi:10.1080/741938206

Bluck, S., Alea, N., Habermas, T., & Rubin, D. C. (2005). A TALE of three functions: The self-reported uses of autobiographical memory. *Social Cognition, 23*, 97-117. doi:10.1521/soco.23.1.91.59198

Brown, N. R., Hansen, T. G. B., Lee, P. J., Vanderveen, S. A., & Conrad, F. G. (2012). Historically-defined autobiographical periods: Their origins and implications. In D. Berntsen & D. Rubin (Eds.). *Understanding autobiographical memory: Theories and approaches* (pp. 160-180). Cambridge: Cambridge University Press.

Brown, N. R., & Lee, P. J. (2010). Public events and the organization of autobiographical memory: An overview of the living in history project. *Behavioral Sciences in Terrorism and Political Aggression, 2,* 133-149. doi:10.1080/19434471003597431

Brown, N. R., Lee, P. J., Krslak, M., Conrad, F. G., Hansen, T. G. B., Havelka, J., & Reddon, J. R. (2009). How war, terrorism, and natural disaster

affect the organization of autobiographical memory. *Psychological Science, 20*, 399-405. doi:10.1111/j.1467-9280.2009.02307.x

Brown, N. R., Schweickart, O., & Svob, C. (2014). *The effect of collective transitions on the organization and contents of autobiographical memory: A transition-theory perspective.* Unpublished manuscript.

Cohen, G. (1998). The effects of aging on autobiographical memory. In C. P. Thompson, D. J. Herrmann, D. Bruce, J. D. Read, D. G. Payne, & M. P. Toglia (Eds.), *Autobiographical memory: Theoretical and applied perspectives* (pp. 105-123). Mahwah, NJ: Erlbaum.

Coman, A., Manier, D., & Hirst, W. (2009). Forgetting the Unforgettable Through Conversation Socially Shared Retrieval-Induced Forgetting of September 11 Memories. *Psychological Science*, *20*, 627-633. doi:10.1111/j.1467-9280.2009.02343.x

Conway, M. A. (2005). Memory and the self. *Journal of Memory and Language, 53*, 594- 628. doi:10.1016/j.jml.2005.08.005

Conway, M. A., & Bekerian, D. A. (1987). Organization in autobiographical memory. *Memory & Cognition*, *15*, 119-132. doi:10.3758/BF03197023

Conway, M. A., & Holmes, A. (2004). Psychosocial stages and the accessibility of autobiographical memories across the life cycle. *Journal of Personality*, *72*, 461-480. doi:10.1111/j.0022-3506.2004.00269.x

Conway, M. A., & Pleydell-Pearce, C. W. (2000). The construction of autobiographical memories in the self-memory system. *Psychological Review, 107*, 261-288. doi:10.1037/0033-295X.107.2.261

Duke, M. P., Lazarus, A., & Fivush, R. (2008). Knowledge of family history as a clinically useful index of psychological well-being and prognosis: A brief report. *Psychotherapy: Theory, Research, Practice, Training*, *45*, 268–272. doi:10.1037/0033-3204.45.2.268

Fiese, B. H., Hooker, K. A., Kotary, L., Schwagler, J., & Rimmer, M. (1995). Family stories in the early stages of parenthood. *Journal of Marriage and the Family*, 763-770. doi:10.2307/353930

Fitzgerald, J. M., & Lawrence, R. (1984). Autobiographical memory across the life-span. *Journal of Gerontology*, *39*, 692-698. doi:10.1093/geronj/39.6.692

Fivush, R., Bohanek, J. G., & Duke, M. P. (2008).The intergenerational self: Subjective perspective and family history. In F. Sani (Ed.). *Individual and collective self-continuity* (pp. 131-143). Mahwah, NJ: Erlbaum.

Fivush, R., Bohanek, J. G., & Zaman, W. (2011). Personal and intergenerational narratives in relation to adolescents' well-being. *New Directions for Child and Adolescent Development*, *131*, 45–57. doi:10.1002/cd.288

Halbwachs, M. (1952/1992). *On collective memory* (L. A. Coser, Trans.). Chicago: The University of Chicago Press.

Harris, C. B., Keil, P. G., Sutton, J., Barnier, A. J., & McIlwain, D. J. (2011). We remember, we forget: Collaborative remembering in older couples. *Discourse Processes*, *48*, 267-303. doi:10.1080/0163853X.2010.541854

Kaitz, M., Levy, M., Ebstein, R., Farone, S. V., & Mankuta, D. (2009). The intergenerational effects of trauma from terror: A real possibility. *Infant Mental Health Journal, 30*, 158-179. doi:10.1002/imhj.20209

Kraaykamp, G., & Nieuwbeerta, P. (2000). Parental background and lifestyle differentiation in Eastern Europe: Social, political, and cultural intergenerational transmission in five former socialist societies. *Social Science Research*, *29*, 92-122. doi:10.1006/ssre.1999.0655

Kuran, T. (1998). Ethnic norms and their transformation through reputational cascades. *Journal of Legal Studies, 27*, 623-659. doi:10.1086/468038

Kuwabara, K. J., & Pillemer, D. B. (2010). Memories of past episodes shape current intentions and decisions. *Memory*, *18*, 365-374. doi:10.1080/09658211003670857

Malkki, L. H. (1995). *Purity and exile: Violence, memory, and national cosmology among Hutu refugees in Tanzania*. Chicago: University of Chicago Press.

Mollica, R. F., Caspi-Yavin, Y., Bollini, P., Truong, T., Tor, S., & Lavelle, J. (1992). The Harvard Trauma Questionnaire: Validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees. *The Journal of Nervous and Mental Disease*, *180*, 111-116.

Nauck, B. (2001). Intercultural contact and intergenerational transmission in immigrant families. *Journal of Cross-Cultural Psychology, 32*, 159-173. doi:10.1177/0022022101032002004

Neisser, U. (1978). Memory: What are the important questions? In M. M. Gruneberg, P. E. Morris, & R. N. Sykes (Eds.), *Practical aspects of memory* (pp. 3-24). London, UK: Academic Press.

Nelson, K. (1993). The psychological and social origins of autobiographical memory. *Psychological Science, 4*, 7-14. doi:10.1111/j.1467-9280 .1993.tb00548.x

Noels, K. A., Pon, G., & Clément, R. (1996). Language, identity, and adjustment: The role of linguistic self-confidence in the acculturation process. *Journal of Language and Social Psychology*, *15*, 246-264. doi:10.1177/0261927X960153003

Nourkova, V., Bernstein, D. M., & Loftus, E. F. (2004). Altering traumatic memory. *Cognition & Emotion, 18,* 575–585. doi:10.1080/ 02699930341000455

Nourkova, V. V. & Brown, N. R. (2014). *Assessing the impact of "the collapse" on the organization and content of autobiographical memory in the former Soviet Union.* Unpublished manuscript.

O'Bryan, M., Fishbein, H. D., & Ritchey, P. N. (2004). Intergenerational transmission of prejudice, sex role stereotyping, and intolerance. *Adolescence*, *39*, 407-426.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin*, *108*, 499-514. doi:10.1037/0033-2909.108.3.499

Pillemer, D. B. (1992). Remembering personal circumstances: A functional analysis. In E. Winograd & U. Neisser (Eds.), *Affect and accuracy in recall: Studies of "flashbulb" memories* (pp. 236-264). New York: Cambridge University Press.

Pillemer, D. B. (2003). Directive functions of autobiographical memory: The guiding power of the specific episode. *Memory, 11*, 193-202. doi:10.1080/741938208

Rasmussen, A. S., & Berntsen, D. (2009). Emotional valence and the functions. *Memory & Cognition*, *37*, 477-492. doi:10.3758/MC.37.4.477

Rasmussen, A. S., & Habermas, T. (2011). Factor structure of overall autobiographical memory usage: The directive, self and social functions revisited. *Memory*, *19*, 597-605. doi:10.1080/09658211.2011.592499

Rubin, D. C. (1995). *Memory in oral traditions*. New York: Oxford University Press.

Rubin, D. C., Rahhal, T. A., & Poon, L. W. (1998). Things learned in early adulthood are remembered best. *Memory & Cognition, 26*, 3-19. doi:10.3758/BF03211366

Schönpflug, U. (2001). Intergenerational transmission of values: The role of transmission belts. *Journal of Cross-Cultural Psychology, 32,* 174-185. doi:10.1177/0022022101032002005

Sperber, D. (1994). The modularity of thought and the epidemiology of representations. In L. A. Hirschfeld & S. A. Gelman (Eds.), *Mapping the*

mind (pp. 39-67). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511752902.003

Svob, C. & Brown, N. R. (2012). Intergenerational transmission of the reminiscence bump and biographical conflict knowledge. *Psychological Science, 23,* 1404-1409. doi: 10.1177/0956797612445316

Svob, C., Brown, N. R., Reddon, J. R., Uzer, T., & Lee, P. J. (2013). The transitional impact scale: Assessing the material and psychological impact of life transitions. *Behavior Research Methods*. Advance online publication. doi:10.3758/s13428-013-0378-2

Swallow, K. M., Zacks, J. M., & Abrams, R. A. (2009). Event boundaries in perception affect memory encoding and updating. *Journal of Experimental Psychology: General*, *138*, 236-257. doi:10.1037/a0015631

Symons, C. S., & Johnson, B. T. (1997). The self-reference effect in memory: A meta-analysis. *Psychological Bulletin*, *121*, 371-394. doi:10.1037/0033-2909.121.3.371

Talarico, J. M., & Rubin, D. C. (2003). Confidence, not consistency, characterizes flashbulb memories. *Psychological Science*, *14*, 455-461. doi: 10.1111/1467-9280.02453

Thomsen, D. K., & Berntsen, D. (2008). The cultural life script and life story chapters contribute to the reminiscence bump. *Memory*, *16*, 420-435. doi: 10.1080/09658210802010497

Thomsen, D. K., Pillemer, D. B., & Ivcevic, Z. (2011). Life story chapters, specific memories and the reminiscence bump. *Memory*, *19*, 267-279. doi: 10.1080/09658211.2011.558513

Walker, W. R., Skowronski, J. J., Gibbons, J. A., Vogl, R. J., & Ritchie, T. D. (2009). Why people rehearse their memories: Frequency of use and relations to the intensity of emotions associated with autobiographical memories. *Memory*, *17*, 760-773. doi:10.1080/09658210903107846

Zacks, J. M., Speer, N. K., Swallow, K. M., Braver, T. S., & Reynolds, J. R. (2007). Event perception: A mind-brain perspective. *Psychological Bulletin*, *133*, 273-293. doi:10.1037/0033-2909.133.2.273

Appendix

Scale Items for Phase 3 of Study

1. Please rate the importance of this event in your parent's life:

Not at all Important 1 2 3 4 5 Very Important

2. How often did your parent talk about this event with you?

Never 1 2 3 4 5 Frequently

3. To what extent did this event impact your parent's external material circumstances (the people, places, things, and activities on your parent's daily life)?

Not at All 1 2 3 4 5 A Lot

4. To what extent did this event impact your parent psychologically (i.e., their attitudes, beliefs, emotions)?

Not at All 1 2 3 4 5 A Lot

5. To what extent was this event positive or negative?

Very Negative 1 2 3 4 5 Very Positive

6. To what extent was this event related to a public historical event (e.g., war)?

Not at All 1 2 3 4 5 A Lot

7. What was the public historical event? _____

To what extent do you agree with the following statements?

8. This event forms a part of my identity, of who I consider myself to be.

Completely Disagree 1 2 3 4 5 Completely Agree

9. This event is a reference point for the way I understand myself and the world.

Completely Disagree 1 2 3 4 5 Completely Agree

10. This event is a part of my own life story.

Completely Disagree 1 2 3 4 5 Completely Agree

11. This event colors the way I think and feel about other experiences.

Completely Disagree 1 2 3 4 5 Completely Agree

12. This event impacts my life decisions.

Completely Disagree 1 2 3 4 5 Completely Agree

13. This event helps me to better understand my parent.

Completely Disagree 1 2 3 4 5 Completely Agree

14. This event influences the relationships I have with others.

Completely Disagree 1 2 3 4 5 Completely Agree

Chapter IV

STUDY 3 – INTERGENERATIONAL TRANSMISSION OF HISTORICAL EVENTS AND XENOPHOBIC ATTITUTDES

Abstract

Intergenerational transmission of memory is a process by which biographical knowledge contributes to the construction of collective memory (representation of a shared past). We investigated the intergenerational transmission of historical conflict knowledge and xenophobia via a parent's life story in post-war Croatians. We compared two groups of young adults from: (1.) Eastern Croatia (extensively affected by the war) and (2.) Western Croatia (affected relatively less by the war). Subjects were asked to (a) recall the ten most important that occurred in one of their parents' lives, (b) estimate the calendar years of each, and (c) provide scale ratings on them. Additionally, (d) all subjects completed a modified Bogardus Social Distance scale, as well as (e) War Events Checklist for their parents' lives. There were several findings. First, approximately two-thirds of Eastern Croatians and one-half of Western Croatians reported war-related events from their parents' lives. Second, outright social ostracism and aggression toward out-groups were rarely expressed, independent of region. Nonetheless, in-group cohesion and solidarity were notably higher in both regions. Third, identity was implicated in social attitudes (Eastern Croatia) and correlated with a parent's war experiences and degree of life story rehearsal (Western Croatia). This suggests a parent's individual

experiences can impact the next generation's identity, but is insufficient to impact their social attitudes. Further, it suggests identity and social attitudes are predominantly socially constructed. Finally, the temporal distribution of events surrounding the war produced an upheaval bump, suggesting major transitions (e.g., war) contribute to the way collective memory is formed.

Keywords: intergenerational transmission, collective memory, Transition Theory, autobiographical memory, xenophobia, Croatian War

Intergenerational Transmission of Historical Events and Xenophobic Attitudes

Intergenerational transmission is a mechanism by which culture is transmitted. Similar to genetic transmission, it is selective in what is passed on, but is unique in that it is socially mediated (Atran, 2001; Coker, 2008; Schönpflug, 2001). Intergenerational transmission has been explored across a wide-range of domains, including the transmission of personality traits and psychological disorders in clinical psychology (Kaitz, Levy, Ebstein, Farone, & Mankuta, 2009; Weingarten, 2004; Yehuda, Bell, Bierer, & Schmeidler, 2008), the transmission of culture and oral traditions in anthropology (Hoskins, 1998; Kuran, 1994; Sperber, 1994), and the transmission of collective memory and social attitudes in sociology (Halbwachs, 1952/1992; Kraaykamp, 2000). Although this interdisciplinary approach has shed light on various aspects of intergenerational transmission, a cohesive theory that bridges individual processes with a collective experience has not been explicated (Hirst & Manier, 2008; Olick & Robbins, 1998). We attempt to fill this gap by investigating

intergenerational transmission within a socio-cognitive framework. Specifically, we address two main questions: (a) How are the memories of parents who have lived through war remembered by their children, and (b) How do these memories impact xenophobic attitudes? To this end, we compare the intergenerational transmission of memories and xenophobic attitudes in second-generation Croatians whose parents lived in regions that were either devastated by the war (Eastern Croatia) or were affected relatively little by the war (Western Croatia).

We are at a unique moment in history to accomplish this task. In the early to mid-1990s a devastating war tore Yugoslavia into its constituent, newly independent republics. While the violence has mostly dissipated over the years, inter-ethnic tensions remain in areas where once-warring ethnic groups continue to co-exist. This is particularly the case in Croatia, which is composed of Serbian Orthodox, Croatian Catholics, and, to lesser extent, Bosnian Muslims. Intense fear and hatred of respective out-groups may be expected in those who have lived through the horrific experiences of war. However, a generation that has had no direct experience of the war is now emerging into adulthood. It is an opportune time to ask how the war experiences of the first generation will be passed onto the next - what will be remembered, and how will it impact the potential xenophobic attitudes of the next generation?

To answer these questions, we compare two groups of second-generation Croatians – one from Osijek (Eastern Croatia), the other from Rijeka (Western Croatia). Eastern Croatia suffered the greatest degree of devastation from the war as it most nearly borders Serbia (the aggressor against the Croatia in the

war). The Eastern Croatian river port-city, Vukovar, for example, became a highly critical point in the Croatian war as it was the first Croatian town to fall and surrender itself to the Serbs (Cigar, 1993). The Eastern region of Croatia suffered an onslaught of bitter fighting for months before the capture of Vukovar's hospital, the massacre of its wounded Croatian prisoners, and the fall of its city in November, 2011 (Cigar). At that time, the JNA (Yugoslav People's Army led directly from Serbia) reported that the final surrender comprised 300 Croatian military personnel, 2000 'unarmed Croatian military', and 5000 civilians (Narodna Armija, 1991, as cited in Cigar).

In contrast, Western Croatia was affected relatively little by the war as it is on the opposite side of Croatia along the Adriatic Sea, nearly bordering Italy. Further, the region of Istria in the most extreme western portion of Croatia had top military generals comprising Croatians, Slovenians, and Serbs. As such, the JNA was dissuaded from launching an outright attack on Istria and the northern coastal regions (Cigar, 1993). Instead, the greatest impact of the war in this region comprised a virtual standstill in tourism (the region's top industry), as well as severe suppression in its transport and economic development as foreign countries imposed sanctions and avoided diplomatic relations with Croatia (Čavlek, 2002; Rivera, 2008).

As a result, the war experiences in Eastern and Western Croatia were vastly distinct. By comparing groups from the two regions, we are able to determine the degree to which a parent's direct experience in the war impacts what is remembered by the next generation, as well as the degree to which

xenophobic attitudes are impacted by personal experience and culture, respectively.

To this end, we employ a 5-Phase paradigm. In Phase 1, participants were asked to list the ten most important events in one of their parents' lives. In Phase 2, the events from Phase 1 were re-presented and the calendar year of each event was estimated. In Phase 3, ratings were collected on the impact each event has had on the life and attitudes of both the parent and the participant, respectively. In Phase 4, participants completed a modified Bogardus Social Distance scale (Malešević & Uzelac, 1997) to provide measures of in-group cohesion and out-group exclusion. And, in Phase 5, participants were asked to respond to an adapted War Event's Checklist (Karam, Al-Atrash, Saliba, Melhem, & Howard, 1999) for their parent's life.

Croatian War and Xenophobia

There were several events that set the stage for the war that was waged in Croatia, including deeply held hatreds percolating from the past millennia to the provocative decision in the mid-1980s to establish a Greater Serbia by claiming Serbian land wherever Serbs had settled (Cigar, 1993). The first palpable and commonly agreed upon trigger of the war, however, began in May 1990 when the first multi-party elections led to the declaration of autonomy from the Serbian-controlled region of Krajina (Cigar; Malešević & Uzelac, 1997). In June 1991, Croatia declared complete independence and sovereignty from the former Yugoslavia. And, by January 1992, Croatia was internationally recognized as an independent state. Nearly two years after the violent turmoil and upheaval began,

by the beginning of 1992, approximately one-third of Croatian territory was under the control of local Serb rebels or the JNA. According to Malešević and Uzelac, the character of the defensive war against Serbian aggression was transformed into one of violent ethnic conflict between Croats, Serbs, and Muslims. Indeed, conduct from the Serbian side suggested a state-sanctioned policy to support "ethnic cleansing" (Cigar, 1993, p. 322). The marked change from war as a military endeavor to violent, inter-ethnic conflict affected the social attitudes of Croatians. These ethnic tensions continued to escalate and, eventually, spread to war in Croatia's neighboring state, Bosnia-Herzegovina, in March, 1992.

At the height of the Croatian and Bosnian wars, Malešević and Uzelac (1997) surveyed young adults' social attitudes in Zagreb, the capital city of Croatia (in May 1992 and June 1993). Approximately 80% of the respondents were not impacted by the war directly (e.g., exposed to heavy shelling or bombing), yet the growing impact of the war on their xenophobic attitudes was evident, with social distance scores being significantly higher in 1993 than in 1992. To examine the degree to which these attitudes proliferate across generations, we employ the same modified Bogardus Social Distance scale with the subsequent generation of Croatians. At the time of data collection, this second-generation was approximately the same age as the parent's generation in Malešević and Uzelac's study.

The Bogardus Social Distance scale (Bogardus, 1928) measures the willingness of people to engage in social contact with various out-groups. The

scale does not measure the degree of hostility, *per se*, but rather implies an omnibus measure of hatred, hostility, disgust, and fear. Malešević and Uzelac (1997) expanded the standard Bogardus Social Distance scale from seven to nine degrees of social acceptance. The scale comprised a continuum of three parts: (a) ethnic distance, (b) ethnic ostracism, and (c) ethnic aggressiveness. Taken together, the latter two sections suggest out-group exclusion, while the former implies in-group solidarity. Nine degrees of acceptance were offered for eleven ethnic groups, ranging from "close relatives by marriage" to "I would personally exterminate all of them." Higher group mean differences suggested greater social distance. The greatest social distance reported by Croatians was toward Serbs in 1992, while the greatest rise in social distance between 1992 and 1993 was toward Muslims.

Collective Memory

We situate the present study within the context of collective memory. Collective memory can be defined as a representation of a past that is shared by members of a common social group (Zaromb, Butler, Agarwal, & Roediger, 2014). Collective memory studies generally focus on public historical events that impact a fairly large group of people. Collective memory studies can, however, also include smaller groups of individuals, such as couples (Harris, Keil, Sutton, Barnier, & McIlwain, 2011) and families (Fivush, Bohanek, & Duke, 2008, Fiese, Hooker, Kotary, Schwagler, & Rimmer, 1995) recollecting various significant events (Halbwachs, 1952/1980). In the present study we examine the transmission of important life events from a parent's life. In particular, we are

interested in the transmission of historical events, the way they are organized in memory, and their impact on social attitudes.

Transition Theory

One theory of memory, *Transition Theory* (Brown, Hansen, Lee, Vanderveen, & Conrad, 2012; Brown & Lee, 2010; Brown et al., 2009; Nourkova & Brown, 2014; Zebian & Brown, 2014), has investigated the impact of historical events on memory. According to Transition Theory, memory is organized by major transitional events that signal or cause marked changes in the ordinary circumstances of daily life. In particular, Brown and colleagues have examined the impact of public, historical events on autobiographical memory and have observed a "Living-in-History" (LiH) effect (Brown et al., 2009). That is, personal events were dated frequently with respect to public historical events in populations that had undergone sudden, unexpected, dramatic, invasive, and prolonged disruptions to the *fabric of their daily lives* (e.g., Bosnians who lived through the Siege of Sarajevo; residents of Ismit, Turkey who survived a catastrophic earthquake in 1991). Interestingly, the LiH effect was not observed in neighboring populations (e.g., in Serbia and Ankara, Turkey), suggesting that geographical proximity is not a predictor of the LiH effect.

Transition Theory has also been supported in memory across generations. Svob and Brown (2012) asked adults children of parents who emigrated due to violent political upheaval to list the ten most important events in their parents' lives and to estimate the date of each while talking aloud. Albeit to an attenuated extent, the LiH effect was also observed in the mnemonic distribution of a

parent's life in 5% of dating protocols. Further, the temporal distribution of a parent's life was structured according to major life transitions – in particular, immigration, producing an *immigration bump*. Moreover, 25% of the events reported from a parent's life were historical.

In a follow-up study by Svob and Brown (2014), adult children of refugees, immigrants, and Canadians demonstrated similar patterns of findings. Notably, an immigration bump was observed in the temporal distribution of a parent's life for both the immigrant and refugee groups, respectively. Further, 24% of the events reported from the refugee parents' lives and 10% of the events from the immigrant parents' lives were historical. And, interestingly, the unique functions served by historical events, and not by non-historical events, were to better understand one's parent and oneself. These findings suggest that historical events are unique in the ways they are transmitted, absorbed, and applied by subsequent generations.

The present study builds upon and extends the work of Svob and Brown (2012; 2014). We examine the transmitted events and attitudes of a generation whose parents lived through a terrible war – but, unlike the participants' parents in Svob and Brown's studies, did not immigrate. As such, an immigration bump will not be present in the temporal distribution of a parent's life. Alternatively, in accordance with Transition Theory, an *upheaval bump* (Brown, Schweickart, & Svob, 2014) for the years of the war is expected. Further, by keeping both the political conflict and ethnic groups constant, we are able to examine xenophobic attitudes across geographical regions. Moreover, the Croatian participants

provide an age-matched sample for comparison to Svob and Brown's participants. By comparing the present findings with Svob and Brown's, we seek to shed light on whether immigration mitigates or amplifies the degree of conflict knowledge that is transmitted across generations. From this perspective, we examine its implications for the maintenance of group identity and the persistence of socially-mediated attitudes toward a parent's ethnic out-group, particularly in a generation that has not been directly exposed to political conflict and upheaval.

Group Identity

According to Assmann (1995), the defining feature of the transmission of collective memory is social identity. Assmann suggests that the transmission of historical events can occur through two means (a) *communicative memory* (collective memory that is transmitted through personal, everyday communication), and (b) *cultural memory* (collective memory that is transmitted through objective means, such as cultural artifacts [texts, rites, monuments] and institutional communications [recitation, practice, observance]). From this perspective, the present study, focuses on communicative memory as Generation 0 (parent) communicates information to Generation 1 (child).

In the transition from communicative to cultural memory (from memory to history), a close connection to groups and their identities emerges. Assmann refers to this as the *concretion of identity*. It is unlikely, however, that communicative and cultural memory are necessarily dichotomous and discrete. It may be better to conceive of them as a part of a continuum. For instance, the

concretion of identity has been observed in Svob and Brown's (2014) between a parent and adult child's generation. This suggests that the concretion of identity, in fact, occurs substantially earlier than Assmann allows, and that memory, history, and identity are implicated concurrently with one another.

The importance of the relation between identity and what is remembered has provided the basis for various models of memory, and may well be applicable to the intergenerational transmission of collective memory, as well. For example, Conway's (2005) self-memory system model of autobiographical memory asserts that the role and function of autobiographical memory is to define the self, and in turn, the self regulates and constrains what is remembered. Berntsen and Rubin (2006) found that the more central a traumatic event was to person's life story and sense of identity, the higher the likelihood the event would result in PTSD symptoms. Berntsen's (2009) model of flashbulb memories (i.e., highly detailed memories for the context of learning about surprising and significant public events) suggests that social identity is central to the formation and maintenance of flashbulb memories. Berntsen suggests that having a flashbulb memory for a public event, in itself, asserts belongingness and identification with a particular group. For example, more British people report having flashbulb memories for the death of Princess Diana than do Americans. Similarly, more African American people report flashbulb memories for the assassination of Martin Luther King, Jr. than do Caucasian Americans.

Of particular relevance to the present study, there is also a strong association between social identity and historical memory. Historical memories

are often tilted in favor of one's in-group and are thereby skewed, selective, and biased in their depictions of the past (Blatz & Ross, 2009). For example, Sahdra and Ross (2007) investigated the historical memories of Sikhs and Hindus. Sikhs and Hindus who identified highly with their religious group recalled fewer incidents of violence and hatred perpetuated by in-group members than did low identifiers.

Wohl and Branscombe (2009) investigated group threat, collective angst, and in-group forgiveness for the war in Iraq. In contrast to Sahdra and Ross (2007), the authors found that in-groups were less likely to forget in-group wrong doings. Reminders of past threat to the in-group resulted in inducing *collective angst* (concern for the future of the group) and thereby increased forgiveness for the in-group's transgressions against its respective out-group. Further, invoking perceived threat to the in-group motivated the group to engage in in-group protective behaviors, including potentially harmful ones.

Research on the impact of historical events on memory holds important implications for better understanding the intergenerational transmission of history and xenophobic attitudes. It suggests that social identity related to one's in-group may be a factor in the formation of collective memory, and also in the intergenerational transmission of trauma and the perpetuation of group conflict. On this view, people who identify highly with their in-group may be more vulnerable to the intergenerational transmission xenophobia than those who identify with their in-group to a lesser extent, and vice versa. The degree to which a parent's direct war experiences impact the social identity of the next

generation, and the relation such war stories may have to the subsequent generation' social attitudes remains unknown.

Predictions of Present Study

In this exploratory, empirical study, we seek to better understand the individual processes involved in the construction of history and their correlations with xenophobic attitudes. Specifically, we aim to provide data on whether knowledge of, or the explicit sharing of, war experiences fuels or mitigates hateful attitudes in subsequent generations, as well as provide insight into the ways personal memory transforms into historical memory. It is difficult to predict the outcome of the present study as there is much complexity and subtlety to consider.

First, we expect a greater amount of historical conflict knowledge to be transmitted through the life stories of parents from the extensively war-torn region of Eastern Croatia than from the comparatively lesser-impacted region of Western Croatia. The degree to which event narratives are explicitly shared with the second-generation (rehearsal) may, however, impact not only what is subsequently remembered, but also the degree to which xenophobic attitudes proliferate. For instance, it has been shown that silence surrounding the experiences of Holocaust survivors is a predictor of trauma in the second-generation (Anacharoff, Monroe, & Fisher, 1998). The intentional silencing, or discussion, of a parent's war experiences may be further predictive of what events are considered most important in a parent's life, as well as the degree to which xenophobic attitudes prevail.

Second, given the passage of time and lack of direct impact from the war, we expect the xenophobic attitudes of the post-war generation to be mitigated in comparison to the xenophobic attitudes reported by the generation that was directly and immediately impacted by the Croatian war (Malešević & Uzelac, 1997). Alternatively, if the second-generation absorbs the burden of reversing what was done to the first (Volkan, 1997), more extreme degrees of xenophobic attitudes may be observed in the second-generation than in the first-generation.

Third, we suspect that the xenophobic attitudes reported will be comparable across geographical regions, across both Eastern and Western Croatia. This is because the expression of xenophobia is socially-mediated and culturally-sanctioned. That is, the expressions of xenophobia may be more directly related to group identity, than to a parent's individual experience.

Finally, in relation to Transition Theory, we expect the major transitions wrought by the civil war to demonstrate an upheaval bump in the temporal distribution of events reported by both groups. The group from Eastern Croatia, however, will likely exhibit a more robust bump than the group from Western Croatia due to the greater impact the war had on the residents of Eastern Croatia (Svob, Brown, Reddon, Uzer, & Lee, 2014).

Method

Participants

A total of 96 people participated in the study, 36 at the University of Osijek in Eastern Croatia (32 females, 4 males; 18 - 21 years old, $M = 19.3$, $SD = 0.64$) and 60 at the University of Rijeka in Western Croatia (47 females, 13

males; 18 - 20 years old, $M = 19.2$, $SD = 0.48$). Both groups of participants were recruited through introductory psychology classes and received course credit. Four additional participants in Western Croatia were excluded from the study prior to analysis because they failed to report 10 events from their parent's life and, as such, were unable to provide date estimates and ratings for the events. Also, one additional participant was excluded from analysis from Eastern Croatia as she self-identified as a Serbian, which would contaminate the data as we are interested in, specifically, the attitudes of Croatians in Croatia for the present study.

Materials

The materials used for Phases 1 through 3 of the experiment were self-generated and data driven. As discussed below, participants in the first three phases reported important events from their parents' lives to which they further provided date estimates and ratings. In Phase 4, we administered a modified Bogardus Social Distance scale (Malešević & Uzelac, 1997). And, in Phase 5, we participants responded to a modified War Events checklist (Karam et al., 1999).

Bogardus Social Distance Scale. The Bogardus Social Distance scale (Bogardus, 1928) is a self-report assessment tool that measures the degree to which people are willing to engage in contact with other groups. Respondents state reactions to statements varying in intensity of closeness. Following the modified Bogardus Social Distance scale used by Malešević and Uzelac (1997), participants in the present study were instructed as follows: *Based on your first*

feeling reaction, please indicate (check as many as apply) how you feel about having members of the following groups as: Close relatives by marriage; Close personal friends; Colleagues at work; Citizens in my town; Citizens in my country; Avoid all contact with them; Forbid them entry to my country; Would like someone to kill them all; Would personally exterminate them all. The ratings for the various ethnic groups included, Albanians, Croatians, Italians, Germans, Hungarians, Macedonians, Montenegrins, Muslims, Russians, Serbians, and Slovenians. Higher differences between group means equate with greater social distance, a lower willingness to assume contact, and a stronger negative prejudice toward other groups.

War Events Checklist. Participants were asked to complete a 10-item War Events Checklist. The events were adapted from the major categories of Karam et al.'s (1999) War Events Questionnaire. Our respondents indicated *Yes*, *No*, or *Unsure* to the following ten questions related to their parents' experiences in the Croatian war: *Did your parent experience any form of displacement (e.g., forced to change home, school, etc.) during the war; Did your parent emigrate (leave Croatia) because of the war; Did your parent experience separation from their loved ones during the war; Did your parent experience bereavement (death of a loved one) because of the war; Did your parent witness any violent acts (e.g., intimidation, torture, killing) during the war; Was your parent exposed to shelling, bombing, or combat during the war; Was your parent a victim of any violent act(s) during the war; Did your parent suffer any physical injuries during the war; Was your parent involved in the hostilities (e.g., fought in the army,*

carried weapons, etc.) of the war; Did your parent experience extreme deprivation (e.g., of food, water, shelter) during the war? The War Events checklist was used primarily as a validity measure to ensure the two groups indeed varied by region in the degree to which they suffered the atrocities wrought by the war.

Procedure

The experiment was delivered on individual computers within a computer lab. It was self-paced and required approximately 30 to 45 minutes to complete. The materials were all presented in Croatian, after being back-translated from English by four research assistants that were fluent in both English and Croatian. After providing informed consent, the experiment comprised 5 phases.

In Phase 1, participants were asked to choose a parent and to list the 10 most important events from that parent's life. The events could be from any period, from the time their parent was born up to the present and did not have to be listed in any particular order. There were only two restrictions: (a) to restrict the birth of children to one event (if chosen as part of the list), unless there was something distinct about the birth of a child, and (b) to exclude the parent's birth as one of the important events.

In Phase 2, the events reported in Phase 1 were re-presented one at a time and in random order. Participants were asked to provide an estimate of the calendar year that each event took place. They could choose a year from a menu of years spanning 1930 to 2013.

Phase 3 was divided into two sections and replicated the rating scales used by Svob and Brown (2014). In Phase 3a, participants rated (on a 5-point scale) the degree to which they perceived each event to have impacted their parent's life. The items included the belief that the event changed their parent's external material circumstances (1 = *completely disagree*; 5 = *completely agree*), that the event impacted their parent psychologically (1 = *completely disagree*; 5 = *completely agree*), the degree to which each event was important (1 = *not at all important*; 5 = *very important*), the degree to which the parent talked about each event with the participant (1 = *never*; 5 = *frequently*), and the valence of each event (1 = *extremely negative*; 5 = *extremely positive*). Finally, the participant rated the degree to which each event was related to the Croatian war (1 = *not at all*; 5 = *completely*).

In Phase 3b participants again provided ratings on the events reported in Phase 1, but this time they were asked to report the degree of impact each event had on their own life, instead of their parent's. On a 5-point scale, participants rated the degree to which they agreed (1 = *completely disagree*; 5 = *completely agree*) that each event impacted their own sense of identity, became a reference point for the way they understand themselves and the world, is a part of their own life story, colors the way they think and feel about other experiences, impacts their life decisions, helps them to better understand their parent, and influences their relationships with others.

Phase 4 required responses to the modified Bogardus Social Distance scale (Malešević & Uzelac, 1997). And, in Phase 5, participants completed the

War Events Checklist. Once the study was completed, participants were debriefed.

Results and Discussion

The following section is divided into three sub-sections to address the issues raised in the introduction. First, we compare the two groups (Eastern and Western Croatians) on the War Experiences Checklist and the degree to which historical conflict was transmitted via a parent's life story. Next, we examine the Bogardus social distance scores for eleven ethnic groups according to rank and distribution. Further, we compare these scores by region and generation (parent's generation versus present generation), respectively, and examine correlations between social distance, historical conflict knowledge, rehearsal, and identity. Finally, we characterize and describe the temporal distribution of the reported events across groups. With the exception of the identity-related measure, we exclude analyses from Phase 3b as they were not of direct relevance to the interests of the present paper.

Historical Conflict Knowledge

The Eastern and Western samples were similar in several respects. As previously noted, the participants were similar in age and were predominantly female. Further, approximately two-thirds of all the events reported were from a mother's life, rather than a father's (Eastern Croatia, 58.3%; Western Croatia, 61.7%). Aside from location, the only demographical difference between the two regions was that the average age of the parent was modestly higher in Eastern

Croatia (M = 50.4 years, SD = 6.37) than in Western Croatia (M = 48.9 years, SD = 5.62); $t(95) = 3.96$, $p < .001$, $d = 0.81$, 95% CI [0.79, 2.34].

As predicted, the war experiences of Eastern Croatians were more extensive than they were for Western Croatians. On the War Events Checklist, Eastern Croatians reported an average between 4.00 – 5.53 (out of 10) events experienced by their parent during the war, whereas Western Croatians reported an average of 2.40 – 3.88. The lower end of the range refers to the average number of times "Yes" was indicated to indicate a war-related event was experienced, whereas the upper range includes the average number of "Unsure" responses. To be conservative, we considered only the "Yes" responses and found a significant difference between groups ($t(94) = 3.72$, $p < .001$, $d = 0.77$, 95% CI [0.75, 2.45]. The war experiences in Eastern Croatia were significantly greater than they were for Western Croatians. This confirms that the groups indeed differed in the extent to which they were affected by the war and supports our presumption that the two regions of Croatia were variably affected by the war.

Measures of historical conflict knowledge were derived from the scale item regarding each reported event's relation to the war. Responses of 4 or 5 (on a 5-point scale) constituted a historical event, whereas responses of 3 or lower were considered non-historical. As predicted, historical conflict knowledge was transmitted via a parent's life story in both Eastern and Western post-war Croatians, with a greater percentage of participants reporting war-related events in Eastern Croatia than in Western Croatia. In Eastern Croatia, approximately

two-thirds (66.7%) of participants reported at least one war-related event from a parent's life, whereas only about a half (51.7%) of the subjects reported war-related events in Western Croatia. Out of the participants that reported historical events, Eastern Croatians reported an average of 2.08 (*SEM* = 0.29) out of 10, whereas Western Croatians reported an average of 1.94 (*SEM* = 0.22).

Despite the greater number of people reporting historical events in Eastern than in Western Croatia, on average, the total number of historical events reported was in fact comparable across groups ($t(94) = 1.32$, $p = .19$, $d = 0.27$, 95% CI [-0.19, 0.97]). Specifically, out of all the events that were reported from a parent's life, 13.9% were historical in Eastern Croatia, and in Western Croatia, 10% were historical. These figures are lower than the percentage of historical events reported by children of refugees in Svob and Brown's (2012; 2014) studies where 24-25% of the events from a parent's life were historical. It is interesting that the children of refugees in Svob and Brown's studies perceived and recalled more historical events from their parents' lives because it suggests that immigration amplifies, rather than mitigates, the importance of historical knowledge and appears to bind it to a parent's life and, potentially, to the second-generation's sense of an *intergenerational self* (Fivush, et al., 2008). Moreover, this distinction between groups that have emigrated may further elucidate the cognitive processes that contribute and underlie the strong ethnic ties and commitments often observed in diaspora communities (Brah, 2005; Lavie & Swedenburg, 1996). The further one is removed geographically from one's ethnic group, the greater one might grasp to remain connected to it.

Taken together, Eastern Croatians were more apt to report war-related events than were Western Croatians. On average, however, the number of historical events reported remained comparable across the two regions. Thus, on average, the two groups were not significantly different in the degree of historical conflict knowledge that was transmitted if a parent had suffered the atrocities of war.

Social Distance

Social Distance and Xenophobia

Social distance scores (group means across various ethnic groups) on the modified Bogardus Social Distance scale were similar across Eastern and Western Croatians in both rank and degree (see Table 3.1). Planned pairwise comparisons between the two groups revealed no significant differences in their reported attitudes toward the eleven ethnic groups (all *p*s > .05). The most striking difference was that Croatians' social distance scores for fellow Croatians dramatically reversed positions from the lowest rank in 1993 to the highest rank in 2013. This is not problematic as interpretations of Bogardus Social Distance scales depend on mean differences, not ranks. Nonetheless, the exchange of rank positions suggests something more nuanced taking place between the war and post-war generations. Indeed, the overall pattern of responses by the second-generation Croatians (see Table 3.2) was distinct from the parent's generation. Rather than expressing blatant out-group exclusion and aggression (as the parent's generation), second-generation Croatians muted expressed hostility, yet compensated through greater degrees of in-group cohesion and solidarity (see

Table 3.3). While extreme hatred and aggression were rarely reported, second-generation Croatians were reluctant to accept other groups into their personal spheres and daily interactions independent of region. Interestingly, this effect applied fairly indiscriminately and uniformly to all out-groups.

Table 3.1

Mean (Standard Error) Scores and Rankings on Modified Bogardus Social Distance Scale

	Eastern Croatia (2013)	Rank	Western Croatia (2013)	Rank	Central Croatia (1993)*	Rank
Croatians	23.75 (1.26)	1	25.80 (0.85)	1	1.33	11
Serbians	9.36 (0.65)	2	9.27 (0.83)	2	4.73	1
Hungarians	8.14 (0.73)	3	7.07 (0.74)	10	3.04	9
Muslims	8.00 (0.65)	4	8.33 (0.73)	5	4.17	4
Germans	7.97 (0.83)	5	7.70 (0.69)	7	2.79	10
Slovenians	7.53 (0.75)	6	8.03 (0.73)	6	3.63	6
Montenegrins	7.39 (0.74)	7	7.65 (0.72)	8	4.51	2
Italians	7.28 (0.81)	8	8.47 (0.74)	4	3.08	8
Albanians	7.11 (0.69)	9	8.77 (0.76)	3	4.43	3
Macedonians	7.06 (0.77)	10	7.12 (0.74)	9	3.50	7

Russians	6.56 (0.75)	11	6.47 (0.76)	11	3.91	5

* Modified Bogardus Social Distance Scale means reported in Malešević and Uzelac (1997) in 1993

Table 3.2

Percentage of Expressed Acceptance at Each Level of Social Distance on Modified Bogardus Social Distance Scale

Ethnic Groups		1	2	3	4	5	6	7	8	9
Croatians	East	97.2	88.9	77.8	77.8	77.8	0	0	0	0
	West	90.0	90.0	80.0	86.7	86.7	0	0	0	0
Serbians	East	13.9	33.3	44.4	61.1	88.9	5.6	0	0	0
	West	33.3	53.3	46.7	60.0	63.3	1.7	3.3	3.3	3.3
Hungarians	East	22.2	44.4	44.4	44.4	75.0	2.8	0	0	0
	West	25.0	41.7	43.3	40.0	61.7	0	0	0	0
Muslims	East	8.3	36.1	38.9	41.7	83.3	0	2.8	0	0
	West	15.0	50.0	46.7	60.0	60.0	1.7	0	1.7	1.7
Germans	East	41.7	47.2	44.4	41.7	72.2	0	0	0	0
	West	30.0	50.0	51.7	40.0	65.0	0	0	0	0

Slovenians	East	16.7	41.7	36.1	38.9	77.8	0	0	0	0
	West	35.0	55.0	45.0	45.0	66.7	1.7	0	0	0
Montenegrins	East	19.4	38.9	36.1	38.9	72.2	2.8	0	0	0
	West	25.0	50.0	41.7	45.0	65.0	1.7	0	0	0
Italians	East	30.6	44.4	41.7	30.6	72.2	0	0	0	0
	West	40.0	58.3	46.7	58.3	63.3	0	0	0	0
Albanians	East	5.6	33.3	38.9	36.1	72.2	2.8	0	0	0
	West	11.7	41.7	38.3	51.7	63.3	13.3	5.0	1.7	1.7
Macedonians	East	22.2	36.1	38.9	33.3	72.2	0	0	0	0
	West	26.7	46.7	41.7	41.7	60.0	0	0	0	0
Russians	East	13.9	30.6	38.9	36.1	63.9	0	0	0	0
	West	23.3	40.0	40.0	35.0	56.7	0	0	0	0

1 = Close relatives by marriage, 2 = Close personal friends, 3 = Colleagues at work, 4 = Citizens in my town, 5 = Citizens in my country, 6 = Avoid all contact with them, 7 = Forbid them entry to my country, 8 = Would like someone to kill them all, 9 = Would personally exterminate them all

Table 3.3

Percentage of Ethnic Group Inclusion and Exclusion (Collapsed across Eastern and Western Croatia) on Modified Bogardus Social Distance Scale

	Inclusion	Exclusion
Croatians	85.3	0.0
Serbians	49.8	2.2
Italians	48.6	0.0
Germans	48.4	0.0
Slovenians	45.8	0.2
Hungarians	44.2	0.3
Muslims	44.0	1.0
Montenegrins	43.2	0.6
Macedonians	41.9	0.0
Albanians	39.3	3.1
Russians	37.8	0.0

Inclusion: Close relatives by marriage, Close personal friends, Colleagues at work, Citizens in my town, Citizens in my country; *Exclusion*: Avoid all contact with them, Forbid them entry to my country, Would like someone to kill them all, Would personally exterminate them all

The rankings of social distance scores related to various ethnic out-groups were also similar and consistent across regions and generations (Table 3.1). Perhaps most striking, rather than exhibiting the greatest amount of social distance as they did in 1993, out of all the ethnic groups, Serbs were socially accepted to the greatest extent by the post-war generation, ranking second in social distance after Croatians. Hungarians ranked third for Eastern Croatians – likely because Hungary borders Eastern Croatia, while Italians ranked fourth in Western Croatia, where they most nearly border Western Croatia. Muslims came in next in both regions, again, suggesting a greater integration of Bosnian Muslims within post-war Croatia. While the average scores of social distance were not drastically different between the various ethnic groups, the rankings seemed to provide a more incisive measure of the degree to which various groups have been integrated within post-war Croatia.

Interestingly, a markedly different pattern of rankings was observed in the parents' generation in 1993 (Table 3.1; Mališević & Uzelac, 1997). The least social distance was reported between Croatians and Germans, Hungarians, and Italians. This is striking because none of these groups belonged to the former-Yugoslavia. Conversely, the greatest social distance was observed for Serbians, Montenegrins, Albanians, and Muslims. This suggests that the outright hostility and aggression toward former-Yugoslav republics may have diminished over the past twenty years. They appear to be better integrated and are perceived as having the least social distance in relation to post-war Croatians. Of course, the Bogardus Social Distance scale may pick up acceptance and rejection ratings in

a drastically differently fashion during times of intense conflict than twenty years post-conflict, and socially desirable responding may bias the measures we are comparing. Implicit measures of social attitudes would be helpful to provide additional insight into these findings and to circumvent potential biases in self-report measures. This is something that is left to future research.

Social Distance, Historical Knowledge, Rehearsal, and Identity

We now turn to potential correlates of social attitudes expressed in the modified Bogardus Social Distance scale, including war-related experiences from a parent's life story (historical knowledge), the extent to which a parent's life story was discussed and rehearsed, and the degree to which a parent's important life events impacted their children's sense of identity. To begin, the degree of historical conflict knowledge transmitted through a parent's life story failed to correlate with the social attitudes of both Eastern and Western Croatians (see Table 3.4 and Table 3.5). Similarly, the degree to which a parent's life events were rehearsed with the child did not correlate with the social distance attitudes of the second-generation. The only factor that was implicated in social attitudes was the degree to which the second-generation absorbed aspects of a parent's life into their own sense of identity. Interestingly, the two regions differed in the way their sense of identity was implicated.

Eastern Croatians revealed a relatively high correlation between their social attitudes and identity (see Table 3.4). Conversely, identity measures were linked with historical knowledge and rehearsal for a parent's life for Western Croatians (see Table 3.5). This is an interesting finding because it suggests that

social attitudes, including social distance and xenophobia, are socially constructed and do not rely or extend from a parent's war experiences *per se.* They do seem to be, however, intricately linked with a person's identity. Importantly, the construction of identity does not appear to depend on a parent's individual life experiences (Eastern Croatia), despite the fact that it may be impacted by them (Western Croatia).

Table 3.4

Pearson Correlations for Eastern Croatians on Historical Conflict Knowledge from a Parent's Life, Rehearsal, Social Distance, and Identity

	Historical Knowledge	Rehearsal	Social Distance	Identity
Historical Knowledge	1.00			
Rehearsal	.07	1.00		
Social Distance	- .01	.11	1.00	
Identity	.01	.18	- .41*	1.00

***** $p < .05$

Table 3.5

Pearson Correlations for Western Croatians on Historical Conflict Knowledge from a Parent's Life, Rehearsal, Social Distance, and Identity

	Historical Knowledge	Rehearsal	Social Distance	Identity
Historical Knowledge	1.00			
Rehearsal	- .01	1.00		
Social Distance	.13	- .19	1.00	
Identity	.27*	.26*	- .12	1.00

* $p < .05$

This is an interesting finding as it suggests something about the construction and formation of group identity. It implies that identity, at least for Eastern Croatians, was derived predominantly through socio-cultural influences. Nonetheless, we need to acknowledge that the extent of the unreported parent's life story, and potential suffering in the war, remains unknown in the present study. It may have influenced and, indeed, contributed to the identity of our sample of second-generation Eastern Croatians. This possibility will have to be left to future research, which should include the life stories of both parents and, ideally, more males and non-University educated persons.

While making causal claims on the role of identity in the formation and maintenance of social attitudes across generations is tenuous in the present study, its correlational effects are worthwhile to consider nonetheless. The role of group identity has been shown to affect various mnemonic processes, including memories for public, historical events (Berntsen, 2009; Schuman Akiyama, & Knauper, 2003). Our findings between identity and social attitudes are consistent with this literature. Identity, indeed, appears to be the mediating factor between collective memory and social attitudes. In fact, group identity appears to be the overarching structure that subsumes collective memory, social attitudes, and historical conflict knowledge, respectively.

Events from Parent's Life

To end, we consider the scale ratings for identity, rehearsal, valence, material change, and psychological change (see Table 3.6). All five factors have been implicated in autobiographical memory. Planned pair-wise comparisons revealed that the two groups were comparable on all measures (all *p*s > .05), with the exception of identity. That is Eastern Croatians identified with their parent's life stories to a modestly greater extent than Western Croatians ($t(94) = 2.01$, $p = .048$, $d = 0.42$, 95% CI[0.002, 0.57]). Consistent with general findings in autobiographical memory research, the recalled events from a parent's life were rehearsed fairly frequently, were predominantly positive, and were perceived to cause material and psychological changes to their parent's lives (i.e., they were transitional in nature).

Table 3.6

Mean (Standard Error) Ratings on 5-point Scale of Important Parental Life Events

	Eastern	Western
Identity	3.04 (0.03)*	2.75 (0.03)
Rehearsal	3.55 (0.07)	3.62 (0.05)
Valence	3.73 (0.08)	3.79 (0.06)
Material Change	3.77 (0.06)	3.78 (0.05)
Psychological Change	3.69 (0.06)	3.71 (0.05)

*p = .048

As predicted, the transitional ratings (of material and psychological change) were high. Accordingly, Transition Theory predicted that the distribution of events surrounding the war would create an upheaval bump (Brown, et al., 2014). Indeed, this was observed for both Eastern and Western Croatians (see Figure 3.1). Despite Western Croatians demonstrating a modestly mitigated effect, pairwise comparisons using the Kolmogorov-Smirnov test revealed that the distributions between the two groups were comparable (p = .89). This suggests the pattern of results was the same and that both groups exhibit an *upheaval bump*. This finding supports the notion that major life transitions structure both personal and collective memory. Granted, the upheaval bump is conflated with the formative years typically associated with the

reminiscence bump (15-30 years). Nonetheless, the single event of war serves as a central structural marker in the temporal distribution of a Croatian parent's life events.

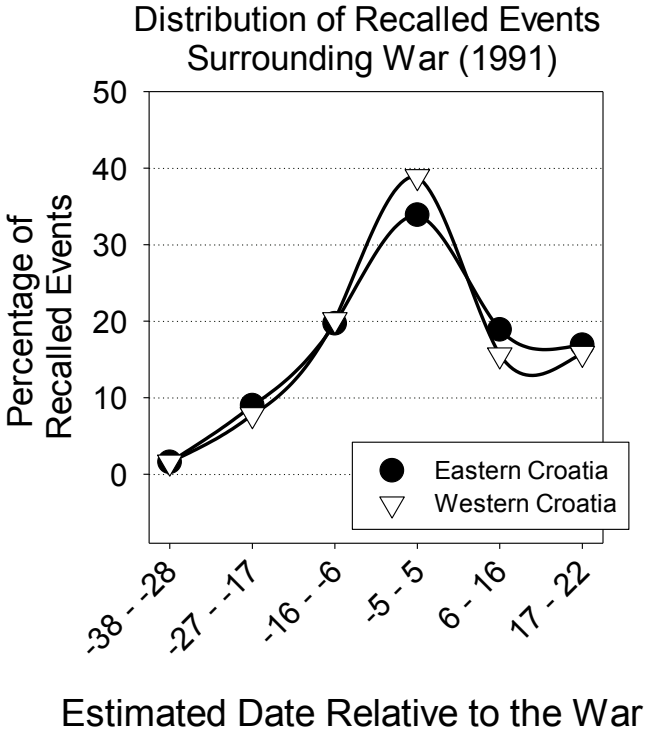

Figure 1. Upheaval bump – Temporal distribution of events surrounding Croatian War (1992)

General Discussion

In this paper we examined the intergenerational transmission of historical conflict via a parent's life story, as well as the intergenerational transmission of social distance attitudes for in-groups and out-groups. We collected data from post-war second-generation Croatians living in two separate regions, one more extensively affected by the war than the other (i.e., Eastern and Western Croatia, respectively). There were several interesting and nuanced findings. First, more people in Eastern Croatia than in Western Croatia reported historical events from

a parent's life. Second, social distance scores were comparable across regions, suggesting social attitudes are culturally-mediated. Third, xenophobic attitudes observed in the parent's generation in 1993 (Malešević & Uzelac, 1997) were greatly diminished, if not obliterated, in the post-war generation twenty years later. Instead, an inverse effect was observed – in-group consolidation and unity were, in comparison to the parent's generation, greatly strengthened and intensified. Fourth, identity was a mediating factor in reported measures of social distance in Eastern Croatians, and was correlated with historical conflict knowledge and rehearsal from a parent's life in Western Croatians. This suggests that a parent's individual experience may impact the next generation's sense of identity, but, alone, is insufficient to impact social attitudes. Rather, social identity appears to be developed through a variety of societal and cultural means. Finally, the Croatian war created an upheaval bump in the temporal distribution of important events from a parent's life, supporting Transition Theory's notion that transitional events structure and organize memory. The present study demonstrates the importance of transitional events not only in memory, but in the construction of history, as well.

The importance of placing one's own life within the context of an ethnic heritage and family history has been emphasized by the present study. Doing so provides a framework for understanding oneself as a member of a group that extends before one's birth and provides the context and direction for an individual's life story to unfold (Fivush, 2008). As such, a person's life may be embedded within the life stories of people that are both past and present.

Granted, the stories passed on from one generation to the next, especially those that concern daily life in war, may be regarded as sequences of fragmented, separate tellings of particular anecdotes. For members belonging to the same group, however, such segmented stories appear to seek a common theme and yield a larger unity that transcends explicit textualization (Povrzanović, 1995). As such, these stories become the bedrock upon which group identity, collective memory, and history are formed.

According to Assmann (1995), collective memory preserves the store of its knowledge precisely through the awareness of a group's unity and peculiarity. The content of historical knowledge is uniquely characterized by the sharp distinctions made between those who belong and those who do not. Concretion of identity (the relation to the group) drives what is remembered and how it is transmitted and acquired by subsequent generations. To a certain extent, our data support this notion and underline the importance of identity in the intergenerational transmission of collective memory. In contrast to Assmann, our findings suggest that this process develops much earlier – that is, it begins to unfold between Generation 0 and Generation 1 (within 20 years), instead of, as Assmann suggests, between 80 to 100 years later. Similar to Assmann, our findings support a tri-partite model of collective memory that incorporates and relates three poles: (a) memory (a shared representation of a common past), (b) culture, and (c) the group (from the family unit to society).

One of the most unexpected and intriguing results of the present study was the inverse effect observed in post-war Croatians regarding xenophobic

attitudes. The manifestly greater degrees of expressed social acceptance for one's in-group than for every other out-group was rather startling and remarkable. The intergenerational transmission of xenophobia is certainly a deeply nuanced, elusive, and complicated phenomenon. Our findings illuminate an intriguing facet of it. Rather than the second-generation Croatians absorbing the anger, hatred, and hostility of the previous generation, they, instead, appear to absorb the fear and deep hesitation to open themselves to other groups. For the most part, explicit ostracism and aggression toward ethnic out-groups was not expressed. There may be several reasons for this, including our predominantly female, university-educated sample, as well as social pressures to conceal such provocative and potentially inciting attitudes. Despite the fact that our samples were of convenience and were not representative, and that there may have been a tendency for subjects to provide socially desirable responses, it remains an important finding. That is, it suggests that peace and reconciliation efforts in post-war torn countries might attend to increasing trust levels and promoting openness to other groups, rather than focusing solely on ameliorating out-group hostilities. Further, encouraging integration and openness could start with seemingly innocuous groups to help diminish suspicion while promoting understanding and tolerance of group differences. It is unknown whether the attitudes expressed in the present study are specific to Croatians, or whether they generalize to other groups. This will have to be left to future research. Nevertheless, if reconciliation efforts are made in Croatia, these findings could prove helpful and may extend to other post-war countries, as well.

A final note relates to the individual mnemonic processes implicated in the formation of collective memory. Transition Theory speculates that major life transitions, or epoch-defining events (Brown & Lee, 2010), change the way people live and play "a central role in defining, altering, and augmenting group identity as it unfolds over time" (Brown et al., 2009, p. 403). Brown and colleagues have discovered that populations that *live-in-history* structure and organize their autobiographical memories according to historically-defined periods. As such, the ways in which Generation 0 construct and communicate their life narratives likely have an impact on the ways their lives are understood by subsequent generations. Indeed, the presence of an upheaval bump in the temporal distribution of important events from a parent's life suggests that this is the case. Major life transitions contribute to an understanding of parent's life and contribute to the construction of a collective past.

References

Anacharoff, M. R., Munroe, J. F., & Fisher, L.M. (1998). The legacy of combat trauma: Clinical implications of intergenerational transmission. In Y. Danieli (Ed.), *International handbook of multigenerational legacies of trauma* (pp. 257-276). New York: Plenum Press.

Assmann, J. (1995). Collective memory and cultural identity. *New German Critique, 65*, 125-133. doi:10.2307/488538

Atran, S. (2001). The trouble with memes: Inference versus imitation in cultural creation. *Human Nature, 12*, 351-381. doi:10.1007/s12110-001-1003-0

Berntsen, D. (2009). Flashbulb memories and social identity. In O. Luminet, & A. Curci (Eds.). *New developments in the study of flashbulb memories* (pp. 187-205). Psychology Press.

Berntsen, D., & Rubin, D. C. (2006). The centrality of event scale: A measure of integrating a trauma into one's identity and its relation to post-traumatic stress disorder symptoms. *Behaviour Research & Therapy, 44*, 219-231. doi:10.1016/j.brat.2005.01.009

Blatz, C. W., & Ross, M. (2009). Historical memories. In P. Boyer, & J. V. Wertsch, (Eds.), *Memory in mind and culture* (pp. 223-237*)*. Cambridge, UK: Cambridge Press.

Bogardus, E. S. (1928). *Immigration and race attitudes.* Boston: Heath.

Brah, A. (2005). *Cartographies of diaspora: Contesting identities*. New York: Routledge.

Brown, N. R., Hansen, G. B., Lee, P. J., Vanderveen, S. A., & Conrad, F. G. (2012). Historically Defined Autobiographical Periods: Their Origins and Implications. In D. Berntsen (Ed.), *Theoretical perspectives on autobiographical memory* (pp. 160-180). Cambridge, UK: Cambridge University Press.

Brown, N. R., & Lee, P. J. (2010). Public events and the organization of autobiographical memory: An overview of the Living-in-History Project. *Behavioral Sciences of Terrorism and Political Aggression, 2,* 133–149. doi:10.1080/19434471003597431

Brown, N. R., Lee. P. J., Krslak, M., Conrad, F. G., Hansen, T., Havelka, J., & Reddon, J. R. (2009). Living in history: How war, terrorism, and natural disaster affect the organization of autobiographical memory. *Psychological Science, 20,* 399-405. doi:10.1111/j.1467-9280.2009.02307.x

Brown, N. R., Schweickart, O., & Svob, C. (2014). *The effect of collective transitions on the organization and contents of autobiographical memory: A transition-theory perspective.* Unpublished manuscript.

Čavlek, N. (2002). Tour operators and destination safety. *Annals of Tourism Research*, 29, 478-496. doi: 10.1016/S0160-7383(01)00067-6

Cigar, N. (1993) The Serbo- Croatian war, 1991: Political and military dimensions. *Journal of Strategic Studies, 16*, 297-338. doi: 10.1080/01402399308437521

Coker, C. (2008). War, memes, and memeplexes. *International Affairs, 84*, 903-914. doi:10.1111/j.1468-2346.2008.00745.x

Conway, M. A. (2005). Memory and the self. *Journal of Memory and Language, 53*, 594-628. doi:10.1016/j.jml.2005.08.005

Fiese, B. H., Hooker, K. A., Kotary, L., Schwagler, J., & Rimmer, M. (1995). Family stories in the early stages of parenthood. *Journal of Marriage and the Family*, 763-770. doi:10.2307/353930

Fivush, R. (2008). Remembering and reminiscing: How individual lives are constructed in family narratives. *Memory Studies*, *1*, 49-58. doi: 10.1177/1750698007083888

Fivush, R., Bohanek, J. G., & Duke, M. P. (2008). The intergenerational self: Subjective perspective and family history. In F. Sani (Ed.). *Individual and collective self-continuity* (pp. 131-143). Mahwah, NJ: Erlbaum.

Halbwachs, M. (1952/1992). *On collective memory* (L. A. Coser, Trans.). Chicago: University of Chicago Press.

Harris, C. B., Keil, P. G., Sutton, J., Barnier, A. J., & McIlwain, D. J. (2011). We remember, we forget: Collaborative remembering in older couples. *Discourse Processes*, *48*, 267-303. doi:10.1080/0163853X.2010.541854

Hirst, W., & Manier, D. (2008). Towards a psychology of collective memory. *Memory, 16*, 183-200. doi:10.1080/09658210701811912

Hoskins, J. (1998). *Biographical objects: How things tell the stories of people's lives*. New York: Routledge.

Kaitz, M., Levy, M., Ebstein, R., Farone, S. V., & Mankuta, D. (2009). The intergenerational effects of trauma from terror: A real possibility. *Infant Mental Health Journal, 30*, 158-179. doi:10.1002/imhj.20209

Karam, E., Al-Atrash, R., Saliba, S., Melhem, N., & Howard, D. (1999). The War Events Questionnaire. *Social Psychiatry Psychiatric Epidemiology, 34*, 265-274. doi:10.1016/j.jad.2008.03.016

Kraaykamp, G., & Nieuwbeerta, P. (2000). Parental background and lifestyle differentiation in Eastern Europe: Social, political, and cultural intergenerational transmission in five former socialist societies. *Social Science Research*, *29*, 92-122. doi:10.1006/ssre.1999.0655

Kuran, T. (1998). Ethnic norms and their transformation through reputational cascades. *Journal of Legal Studies, 27*, 623-659. doi:10.1086/468038

Lavie, S., & Swedenburg, T. (Eds.). (1996). *Displacement, diaspora, and geographies of identity*. Duke University Press.

Nauck, B. (2001). Intercultural contact and intergenerational transmission in immigrant families. *Journal of Cross-Cultural Psychology, 32*, 159-173. doi:10.1177/0022022101032002004

Nourkova, V. V. & Brown, N. R. (2014). *Assessing the impact of "the collapse" on the organization and content of autobiographical memory in the former Soviet Union.* Unpublished manuscript.

Olick, J. K., & Robbins, J. (1998). Social memory studies: From "collective memory" to the historical sociology of mnemonic practices. *Annual Review Sociology, 24*, 105-140. doi:10.1146/annurev.soc.24.1.105

Povrzanović, M. (2000). The imposed and the imagined as encountered by Croatian war ethnographers. *Current Anthropology*, *41*, 151-162. doi: 10.1086/300125

Rivera, L. A. (2008). Managing "spoiled" national identity: War, tourism, and memory in Croatia. *American Sociological Review*, *73*, 613-634. doi:10.1177/000312240807300405

Sahdra, B., & Ross, M. (2007). Group identification and historical memory. *Personality and Social Psychology Bulletin*, *33*, 384-395. doi: 10.1177/0146167206296103

Schönpflug, U. (2001). Intergenerational transmission of values: The role of transmission belts. *Journal of Cross-Cultural Psychology, 32,* 174-185. doi:10.1177/0022022101032002005

Schuman, H., Akiyama, H., & Knäuper, B. (1998). Collective memories of Germans and Japanese about the past half-century. *Memory*, *6*, 427-454. doi: 10.1080/741942611

Sperber, D. (1994). The modularity of thought and the epidemiology of representations. In L. A. Hirschfeld & S. A. Gelman (Eds.), *Mapping the mind* (pp. 39-67). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511752902.003

Svob, C. & Brown, N. R. (2012). Intergenerational transmission of the reminiscence bump and biographical conflict knowledge. *Psychological Science, 23,* 1404-1409. doi: 10.1177/0956797612445316

Svob, C., & Brown, N. R. (2014). *Characterizing historical and non-historical events from a parent's life*. Unpublished manuscript.

Svob, C., Brown, N. R., Reddon, J. R., Uzer, T., & Lee, P. J. (2014). The transitional impact scale: Assessing the material and psychological impact of life transitions. *Behavior Research Methods*, *46*, 448-455. doi:10.3758/s13428-013-0378-2

Volkan, V. (1997). *Blood lines: From ethnic pride to ethnic terrorism*. Boulder, CO: Westview Press.

Weingarten, K. (2004). Witnessing the effects of political violence in families: Mechanisms of intergenerational transmission and clinical interventions. *Journal of Marital and Family Therapy, 30*, 45-59. doi:10.1111/j.1752-0606.2004.tb01221.x

Wohl, M. J., & Branscombe, N. R. (2009). Group threat, collective angst, and ingroup forgiveness for the war in Iraq. *Political Psychology*, *30*, 193-217. doi: 10.1111/j.1467-9221.2008.00688.x

Yehuda, R., Bell, A., Bierer, L. M., & Schmeidler, J. (2008). Maternal, not paternal, PTSD is related to increased risk for PTSD in offspring of Holocaust survivors. *Journal of Psychiatric Research, 42*, 1104-1111. doi:10.1016/j.jpsychires.2008.01.002

Zaromb, F., Butler, A. C., Agarwal, P. K., & Roediger III, H. L. (2014). Collective memories of three wars in United States history in younger and older adults. *Memory & Cognition*, *42*, 383-399. doi: 10.3758/s13421-013-0369-7

Zebian, S., & Brown, N. R. (2014). Living in history in Lebanon: The influence of chronic social upheaval on the organization of autobiographical memories. *Memory, 3*, 194-211. doi: 10.1080/09658211.2013.775310

Chapter V

CONCLUSION

Cultural transmission of historical information plays a central role in shaping society. This higher order of knowledge relies predominantly on the transmission of information learned from other people, those who themselves have often learned it from previous generations. Through an iterative process, language, legends, supernatural beliefs, and social norms are all transmitted through the intergenerational transmission of cultural knowledge (Kalish, Griffiths, & Lewandowsky, 2007). The knowledge that passes from one generation to the next, however, often changes with each iteration (Cavalli-Sforza & Feldman, 1981). The outcome of the transmitted knowledge depends, not only on the information being passed on from the first generation, but also on the properties of the information itself and the individual characteristics of the recipients in the subsequent generation.

In this research project I have examined the properties of historical and non-historical events that are transmitted through a parent's life story to the next generation, as well as the cognitive characteristics of the adult children recalling the events. I adapted methodology employed in the cognitive psychology of autobiographical memory to investigate biographical memory for a parent's life. As a result, several novel findings and contributions to the field of psychology have been made, and have also extended to the multidisciplinary area of collective memory.

In Study 1, I established that the methodology I proposed to investigate the intergenerational transmission of a parent's life story could work. First, by asking young adults to report the ten most important events from a parent's life, it was empirically proven that people could perform the task and that they indeed had knowledge about a parent's life. Second, participants were asked to estimate the dates of each nominated event from their parent's life and to talk aloud while doing so. The verbal protocols provided information on how parental life events are temporally stored in memory. Further, the reference points used to date the events provided information on how the events are stored in the memories of the next generation. Most were organized and associated with major life transitions, and, interestingly, 5% were organized according to historical events from the parents' lives. This finding demonstrated that the *living-in-history* effect (Brown et al., 2009), although mitigated, is transmitted across generations. Further, the scale ratings supported Transition Theory's assertion that memory is structured primarily by transitions. This was evident in the scale ratings for the various events, as well as the *immigration bump* that was observed in the temporal distribution of events. Moreover, the reminiscence bump that is generally observed in autobiographical memory was also observed in the temporal distribution of events for a parent's life. Finally, 25% of the events reported from a parent's life were related to historical events, providing empirical evidence that one of the ways in which historical conflict knowledge is transmitted across generations is via a parent's life story.

In Study 2, the results of Study 1 were replicated and extended. Employing the same methodology as in Study 1 and extending the scale ratings, several new discoveries were made on the properties of historical and non-historical events, as well as their functions for the next generation. First, historical events were perceived to have exerted greater transitional impact upon a parent's life than non-historical events, and were also perceived as being more relevant to the subsequent generation's sense of self. The contribution of historical events to a subsequent generation's identity was demonstrated empirically for the first time. In addition to contributing to the formation of identity, historical events also served an important social function – to help children better understand their parents.

In Study 3, the same paradigm was employed and extended once again with two groups of post-war Croatians from Eastern and Western Croatia, respectively. In particular, this study examined, not only the events that were transmitted across generations, but also social attitudes such as xenophobia. By comparing the findings to Studies 1 and 2, Study 3 suggested that immigration amplifies the degree of conflict knowledge that is transmitted across generations as Croatians recalled between 10-13 % of historical events from a parent's life, whereas 24-25% was observed in the emigrated samples in Studies 1 and 2. The findings of Study 3 also held important implications for the maintenance of group identity and the persistence of socially mediated attitudes toward a parent's ethnic out-group, particularly in generations not exposed to political conflict and upheaval.

Interestingly, although the degree of aggression and hostility expressed for various out-groups was virtually non-existent, this was compensated for by high levels of in-group cohesion and solidarity to the exclusion of all out-groups. Moreover, identity was a mediating factor in the historical information that was transmitted and rehearsed through a parent's life story (in Western Croatia), and was a correlate of social attitudes (in Eastern Croatia). Finally, in relation to Transition Theory, the major transition wrought by the civil war demonstrated an *upheaval bump* (rather than an *immigration bump,* as observed in Study 1 and Study 2) in the temporal distribution of events reported by both groups. This, again, suggests that major transitions play a central role in the way history is formed, remembered, and maintained across generations.

Taken together, the contributions of this research project can help in better understanding the individual processes involved in the construction of history and their correlations with xenophobic attitudes. Further, they hold implications for designing effective interventions for resolving long-standing inter-ethnic conflicts. To this end, the findings suggest that immigration may amplify the second-generation's need to identify with the historical experiences of their parents and that this might have deleterious effects on social attitudes and interactions across generations in conflict-generated diasporas.

Hall and Kostić (2009) conducted a study with Croats, Serbs, and Bosniaks who immigrated to Sweden after the war. They asked whether integration might encourage reconciliatory attitudes among the diasporas. They found a distinction between *structural integration* (one's social position and

standing within the community) and *socio-cultural integration* (informal social contact with natives of the host country). Structural integration was weakly correlated with conciliatory attitudes, while socio-cultural integration significantly enhanced reconciliatory attitudes. This is interesting because it complements the findings of the current project – openness and integration with non-threatening out-groups may help promote cohesion and reconciliation with historically aggressive out-groups. This appears to be the case, not only in diasporas, but in countries of origin, as well (as evidenced by the Croatians in the current project), and across generations. The present data suggest that historical events strengthen each generation's sense of group identity and, in turn, lead to in-group segregation that is indiscriminant toward out-groups. Essentially, the key to promoting peace and reconciliation appears to reside in encouraging openness toward socio-cultural integration.

Future studies on the intergenerational transmission of historical events via a parent's life story now have a basis upon which to pursue their interests. Basic research on memory for events from a parent's life can be further extended to a grandparent's life and so on. A longitudinal study of this sort would provide especially valuable information on the transmission process. Comparative studies on important events parents expect will be retained by the next generation versus the events that in actuality are retained would be interesting to pursue, as well. Further, applied studies in integrating versus segregating in-groups and out-groups could be particularly fruitful in both domestic and non-domestic countries of origin.

As the quote at the beginning of this thesis suggests, the best way to destroy people is to deny or obliterate their understanding of their own history. As has been shown, the ways in which history is remembered serves important psychological functions, ranging from providing a sense of identity and belonging to understanding and empathizing with others. Ultimately, the processes by which representations of history are formed hold potentially positive and/or destructive consequences for the societies of which we are a part. It is my hope that the present research project has provided some insight for realizing the route toward society's higher potential.

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. doi:10.1080/741938207

Anacharoff, M. R., Munroe, J. F., & Fisher, L.M. (1998). The legacy of combat trauma: Clinical implications of intergenerational transmission. In Y. Danieli (Ed.), *International handbook of multigenerational legacies of trauma* (pp. 257-276). New York: Plenum Press.

Assmann, J. (1995). Collective memory and cultural identity. *New German Critique, 65*, 125-133. doi:10.2307/488538

Atran, S. (2001). The trouble with memes: Inference versus imitation in cultural creation. *Human Nature, 12*, 351-381. doi:10.1007/s12110-001-1003-0

Avrahami, J., & Kareev, Y. (1994). The emergence of events. *Cognition*, *53*, 239-261. doi:10.1016/0010-0277(94)90050-7

Baddeley, A. (1981). The concept of working memory: A view of its current state and probable future development. *Cognition*, *10*, 17-23. doi:10.1016/0010-0277(81)90020-2

Baddeley, A. (1988). But what the hell is it for? In M. M. Gruneberg, P. E. Morris, & R. N. Sykes (Eds.), *Practical aspects of memory: Current research and issues* (Vol. 1, pp. 3-18). Chichester, UK: Wiley.

Bar-Tal, D. (2007). Sociopsychological foundations of intractable conflicts. *American Behavioral Scientist, 50*, 1430–1453. doi:10.1177/0002764207302462

Bernstein, D.M., Nourkova, V., & Loftus, E.F. (2008). From individual memories to oral history. In A.M. Colombus (Ed.). *Advances in Psychology Research, 54*, 157-181. Nova Science Publishers.

Berntsen, D. (2009). Flashbulb memories and social identity. In O. Luminet, & A. Curci (Eds.). *New developments in the study of flashbulb memories* (pp. 187-205). Psychology Press.

Berntsen, D., & Rubin, D. C. (2002). Emotionally charged autobiographical memories across the lifespan: The recall of happy, sad, traumatic, and involuntary memories. *Psychology and Aging, 17*, 636-652. doi:10.1037/0882-7974.17.4.636

Berntsen, D., & Rubin, D. C. (2004). Cultural life scripts structure recall from autobiographical memory. *Memory & Cognition, 32*, 427-442. doi:10.3758/BF03195836

Berntsen, D., & Rubin, D. C. (2006). The centrality of event scale: A measure of integrating a trauma into one's identity and its relation to post-traumatic stress disorder symptoms. *Behaviour Research & Therapy, 44*, 219-231. doi:10.1016/j.brat.2005.01.009

Berntsen, D., & Thomsen, D. K. (2005). Personal memories for remote historical events: Accuracy and clarity of flashbulb memories related to World War II. *Journal of Experimental Psychology, 134*, 242-257. doi: 10.1037/0096-3445.134.2.242

Blatz, C. W., & Ross, M. (2009). Historical memories. In P. Boyer, & J. V. Wertsch, (Eds.), *Memory in mind and culture* (pp. 223-237*)*. Cambridge, UK: Cambridge Press.

Bluck, S. (2003). Autobiographical memory: Exploring its functions in everyday life. *Memory*, *11*, 113-123. doi:10.1080/741938206

Bluck, S., Alea, N., Habermas, T., & Rubin, D. C. (2005). A TALE of three functions: The self-reported uses of autobiographical memory. *Social Cognition, 23*, 97-117. doi:10.1521/soco.23.1.91.59198

Bogardus, E. S. (1928). *Immigration and race attitudes.* Boston: Heath.

Boyer, P. (2009). What are memories for? Functions of recall in cognition and culture. In P. Boyer, & J. V. Wertsch (Eds.). *Memory in mind and culture* (pp. 3-32). New York: Cambridge University Press.

Brah, A. (2005). *Cartographies of diaspora: Contesting identities*. New York: Routledge.

Brown, N. R. (1990). Organization of public events in long-term memory. *Journal of Experimental Psychology: General, 119,* 297-314. doi:10.1037//0096-3445.119.3.297

Brown, N. R., Hansen, T. G. B., Lee, P. J., Vanderveen, S. A., & Conrad, F. G. (2012). Historically-defined autobiographical periods: Their origins and implications. In D. Berntsen & D. Rubin (Eds.). *Understanding autobiographical memory: Theories and approaches* (pp. 160-180). Cambridge: Cambridge University Press.

Brown, N. R., & Lee, P. J. (2010). Public events and the organization of autobiographical memory: An overview of the living in history project. *Behavioral Sciences in Terrorism and Political Aggression, 2,* 133-149. doi:10.1080/19434471003597431

Brown, N. R., Lee, P. J., Krslak, M., Conrad, F. G., Hansen, T. G. B., Havelka, J., & Reddon, J. R. (2009). How war, terrorism, and natural disaster affect the organization of autobiographical memory. *Psychological Science, 20*, 399-405. doi:10.1111/j.1467-9280.2009.02307.x

Brown, N. R., Schweickart, O., & Svob, C. (2014). *The effect of collective transitions on the organization and contents of autobiographical memory: A transition-theory perspective.* Unpublished manuscript.

Brown, N. R., & Svob, C. (2012). *Collective transitions and the temporal distribution of autobiographical memories*. Unpublished Manuscript.

Brown, R., & Kulik, J. (1977). Flashbulb memories. *Cognition, 5*, 73-99. doi: 10.1016/0010-0277(77)90018-X

Cavalli-Sforza, L. L., & Feldman, M. W. (1981). *Cultural transmission and evolution: A quantitative approach*. Princeton, NJ: Princeton University Press.

Čavlek, N. (2002). Tour operators and destination safety. *Annals of Tourism Research*, 29, 478-496. doi: 10.1016/S0160-7383(01)00067-6

Cigar, N. (1993) The Serbo- Croatian war, 1991: Political and military dimensions. *Journal of Strategic Studies, 16*, 297-338. doi: 10.1080/01402399308437521

Cohen, G. (1998). The effects of aging on autobiographical memory. In C. P. Thompson, D. J. Herrmann, D. Bruce, J. D. Read, D. G. Payne, & M. P. Toglia (Eds.), *Autobiographical memory: Theoretical and applied perspectives* (pp. 105-123). Mahwah, NJ: Erlbaum.

Coker, C. (2008). War, memes, and memeplexes. *International Affairs, 84*, 903-914. doi:10.1111/j.1468-2346.2008.00745.x

Cole, J. (2001). *Forget colonialism? Sacrifice and the art of memory in Madagascar*. Berkeley: University of California Press.

Coman, A., Manier, D., & Hirst, W. (2009). Forgetting the Unforgettable Through Conversation Socially Shared Retrieval-Induced Forgetting of September 11 Memories. *Psychological Science*, *20*, 627-633. doi:10.1111/j.1467-9280.2009.02343.x

Connerton, P. (1989). *How societies remember*. New York: Cambridge University Press.

Conway, A. R. A., Skitka, L. J., Hemmerich, J. A., & Kershaw, T. C. (2009). Flashbulb memory for 11 September 2001. *Applied Cognitive Psychology, 23*, 605-623. doi: 10.1002/acp.1497

Conway, M. A. (2005). Memory and the self. *Journal of Memory and Language, 53*, 594-628. doi:10.1016/j.jml.2005.08.005

Conway, M. A., & Bekerian, D. A. (1987). Organization in autobiographical memory. *Memory & Cognition*, *15*, 119-132. doi:10.3758/BF03197023

Conway, M. A., & Haque, S. (1999). Overshadowing the reminiscence bump: Memories of a struggle for independence. *Journal of Adult Development, 6*, 35-44. doi: 10.1023/A:1021672208155

Conway, M. A., & Holmes, A. (2004). Psychosocial stages and the accessibility of autobiographical memories across the life cycle. *Journal of Personality*, *72*, 461-480. doi:10.1111/j.0022-3506.2004.00269.x

Conway, M. A., & Pleydell-Pearce, C. W. (2000). The construction of autobiographical memories in the self-memory system. Psychological Review, 107, 261-288. doi:10.1037/0033-295X.107.2.261

Dekel, R., & Goldblatt, H. (2008). Is there intergenerational transmission of trauma? The case of combat veterans' children. *American Journal of Orthopsychiatry, 78*, 281-289. doi: 10.1037/a0013955

Duke, M. P., Lazarus, A., & Fivush, R. (2008). Knowledge of family history as a clinically useful index of psychological well-being and prognosis: A brief report. *Psychotherapy: Theory, Research, Practice, Training*, *45*, 268–272. doi:10.1037/0033-3204.45.2.268

Fiese, B. H., Hooker, K. A., Kotary, L., Schwagler, J., & Rimmer, M. (1995). Family stories in the early stages of parenthood. *Journal of Marriage and the Family*, 763-770. doi:10.2307/353930

Fivush, R. (2008). Remembering and reminiscing: How individual lives are constructed in family narratives. *Memory Studies*, *1*, 49-58. doi: 10.1177/1750698007083888

Fivush, R., Bohanek, J. G., & Duke, M. P. (2008). The intergenerational self: Subjective perspective and family history. In F. Sani (Ed.). *Individual and collective self-continuity* (pp. 131-143). Mahwah, NJ: Erlbaum.

Fivush, R., Bohanek, J. G., & Zaman, W. (2011). Personal and intergenerational narratives in relation to adolescents' well-being. *New Directions for Child and Adolescent Development*, *131*, 45–57. doi:10.1002/cd.288

Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development, 77*, 1568– 1588. doi:10.1111/j.1467-8624.2006.00960.x

Fitzgerald, J. M., & Lawrence, R. (1984). Autobiographical memory across the life-span. *Journal of Gerontology*, *39*, 692-698. doi:10.1093/geronj/39.6.692

Geertz, C. (1973). *The interpretation of culture*. New York: Basic Books.

Halbwachs, M. (1952/1992). *On collective memory* (L. A. Coser, Trans.). Chicago: The University of Chicago Press.

Hall, J., & Kostić, R. (2009). Does integration encourage reconciliatory attitudes among diasporas? *Global Migration and Transnational Politics Working Paper*, *7*.

Harris, C. B., Keil, P. G., Sutton, J., Barnier, A. J., & McIlwain, D. J. (2011). We remember, we forget: Collaborative remembering in older couples. *Discourse Processes*, *48*, 267-303. doi:10.1080/0163853X.2010.541854

Harris, C. B., Paterson, H. M., & Kemp, R. I. (2008). Collaborative recall and collective memory: What happens when we remember together? *Memory*, *16*, 213-230. doi: 10.1080/09658210701811862

Hirst, W., & Manier, D. (2008). Towards a psychology of collective memory. *Memory, 16*, 183-200. doi:10.1080/09658210701811912

Hirst, W., Phelps, E. A., Buckner, R. L., Budson, A. E., Cuc, A., Gabrieli, J. D., ... & Vaidya, C. J. (2009). Long-term memory for the terrorist attack of September 11: Flashbulb memories, event memories, and the factors that influence their retention. *Journal of Experimental Psychology: General*, *138*, 161-176. doi: 10.1037/a0015527

Hoskins, J. (1998). *Biographical objects: How things tell the stories of people's lives*. New York: Routledge.

Janssen, S.M.J., & Murre, J.M.J. (2008). Reminiscence bump in autobiographical memory: Unexplained by novelty, emotionality, valence or importance of personal events. *Quarterly Journal of Experimental Psychology, 61*, 1847–1860. doi: 10.1080/17470210701774242

Kaitz, M., Levy, M., Ebstein, R., Farone, S. V., & Mankuta, D. (2009). The intergenerational effects of trauma from terror: A real possibility. *Infant Mental Health Journal, 30*, 158-179. doi:10.1002/imhj.20209

Kalish, M. L., Griffiths, T. L., & Lewandowsky, S. (2007). Iterated learning: Intergenerational knowledge transmission reveals inductive biases. *Psychonomic Bulletin & Review, 14*, 288-294. doi: 10.3758/BF03194066

Karam, E., Al-Atrash, R., Saliba, S., Melhem, N., & Howard, D. (1999). The War Events Questionnaire. *Social Psychiatry Psychiatric Epidemiology, 34*, 265-274. doi:10.1016/j.jad.2008.03.016

Kraaykamp, G., & Nieuwbeerta, P. (2000). Parental background and lifestyle differentiation in Eastern Europe: Social, political, and cultural intergenerational transmission in five former socialist societies. *Social Science Research*, *29*, 92-122. doi:10.1006/ssre.1999.0655

Kulkofsky, S., Wang, Q., &Koh, J. B. K. (2009). Functions of memory sharing and mother-child reminiscing behaviors: Individual and cultural variations. *Journal of Cognition and Development, 10*, 92–114. doi:10.1080/15248370903041231

Kuran, T. (1998). Ethnic norms and their transformation through reputational cascades. *Journal of Legal Studies, 27*, 623-659. doi:10.1086/468038

Kuwabara, K. J., & Pillemer, D. B. (2010). Memories of past episodes shape current intentions and decisions. *Memory*, *18*, 365-374. doi:10.1080/09658211003670857

Larsen, S. F., & Plunkett, K. (1987). Remembering experienced and reported events. *Applied Cognitive Psychology, 1*, 15-26. doi: 10.1002/acp.2350010104

Lavie, S., & Swedenburg, T. (Eds.). (1996). *Displacement, diaspora, and geographies of identity*. Duke University Press.

Liu, J. H., Paez, D., Slawuta. P., Cabecinhas, R., Techio, E., Kokdemir, D. et al. (2009). Representing world history in the 21st century: The impact of

9/11, the Iraq War, and the nation-state on dynamics of collective remembering. *Journal of Cross-Cultural Psychology, 40,* 667-692. doi: 10.1177/0022022109335557

Luminet, O., Bouts, P., Delie, F., Manstead, A. S. R., & Rimé, B. (2000). Social sharing of emotion following exposure to a negatively valenced situation. *Cognition & Emotion, 14*, 661-668. doi: 10.1080/026999300501176666

Malkki, L. H. (1995). *Purity and exile: Violence, memory, and national cosmology among Hutu refugees in Tanzania*. Chicago: University of Chicago Press.

Mannheim, K. (1952). *Essays on the sociology of knowledge*. London, UK: Routledge.

McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology, 5*, 100-122. doi: 10.1037/1089-2680.5.2.100

Mollica, R. F., Caspi-Yavin, Y., Bollini, P., Truong, T., Tor, S., & Lavelle, J. (1992). The Harvard Trauma Questionnaire: Validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees. *The Journal of Nervous and Mental Disease*, *180*, 111-116.

Nauck, B. (2001). Intercultural contact and intergenerational transmission in immigrant families. *Journal of Cross-Cultural Psychology, 32*, 159-173. doi:10.1177/0022022101032002004

Neisser, U. (1978). Memory: What are the important questions? In M. M. Gruneberg, P. E. Morris, & R. N. Sykes (Eds.), *Practical aspects of memory* (pp. 3-24). London, UK: Academic Press.

Neisser, U. (1981). John Dean's memory: A case study. *Cognition*, *9*, 1-22. doi: 10.1016/0010-0277(81)90011-1

Nelson, K. (1993). The psychological and social origins of autobiographical memory. *Psychological Science, 4*, 7-14. doi:10.1111/j.1467-9280 .1993.tb00548.x

Noels, K. A., Pon, G., & Clément, R. (1996). Language, identity, and adjustment: The role of linguistic self-confidence in the acculturation process. *Journal of Language and Social Psychology*, *15*, 246-264. doi:10.1177/0261927X960153003

Nourkova, V., Bernstein, D. M., & Loftus, E. F. (2004). Altering traumatic memory. *Cognition & Emotion, 18,* 575–585. doi:10.1080/ 02699930341000455

Nourkova, V. V. & Brown, N. R. (2014). *Assessing the impact of "the collapse" on the organization and content of autobiographical memory in the former Soviet Union.* Unpublished manuscript.

Novick, P. (1999). *The Holocaust in American life*. Boston: Houghton Mifflin Company.

O'Bryan, M., Fishbein, H. D., & Ritchey, P. N. (2004). Intergenerational transmission of prejudice, sex role stereotyping, and intolerance. *Adolescence*, *39*, 407-426.

Olick, J. K. (1999). Collective memory: The two cultures. *Sociological Theory, 7*, 333-348. doi: 10.1111/0735-2751.00083

Olick, J. K., & Robbins, J. (1998). Social memory studies: From "collective memory" to the historical sociology of mnemonic practices. *Annual Review Sociology, 24*, 105-140. doi:10.1146/annurev.soc.24.1.105

Pennebaker, J.W., Paez, D., & Rimé, B. (Eds.). (1997). *Collective memory of political events: Social and psychological perspectives.* Hillsdale, NJ: Erlbaum.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin*, *108*, 499-514. doi:10.1037/0033-2909.108.3.499

Pillemer, D. B. (1992). Remembering personal circumstances: A functional analysis. In E. Winograd & U. Neisser (Eds.), *Affect and accuracy in recall: Studies of "flashbulb" memories* (pp. 236-264). New York: Cambridge University Press.

Pillemer, D. B. (1998). *Momentous events, vivid memories*. Cambridge, MA: Harvard University Press.

Pillemer, D. B. (2003). Directive functions of autobiographical memory: The guiding power of the specific episode. *Memory, 11*, 193-202. doi:10.1080/741938208

Povrzanović, M. (2000). The imposed and the imagined as encountered by Croatian war ethnographers. *Current Anthropology*, *41*, 151-162. doi: 10.1086/300125

Pratt, M. W., & Fiese, B. H. (2004). *Family stories and the life course*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Rasmussen, A. S., & Berntsen, D. (2009). Emotional valence and the functions. *Memory & Cognition*, *37*, 477-492. doi:10.3758/MC.37.4.477

Rasmussen, A. S., & Habermas, T. (2011). Factor structure of overall autobiographical memory usage: The directive, self and social functions revisited. *Memory*, *19*, 597-605. doi:10.1080/09658211.2011.592499

Rivera, L. A. (2008). Managing "spoiled" national identity: War, tourism, and memory in Croatia. *American Sociological Review*, *73*, 613-634. doi:10.1177/000312240807300405

Roediger, H. L., Zaromb, F. M., & Butler, A. C. (2009). The role of repeated retrieval in shaping collective memory. In P. Boyer, & J. V. Wertsch, (Eds.), *Memory in mind and culture* (pp. 138-170*)*. Cambridge, UK: Cambridge Press.

Rowland-Klein, D., & Dunlop, R. (1997). The transmission of trauma across generations: Identification with parental trauma in children of Holocaust survivors. *Australian and New Zealand Journal of Psychiatry, 31*, 358-369. doi: 10.3109/00048679809065528

Rubin, D. C. (1995). *Memory in oral traditions*. New York: Oxford University Press.

Rubin, D. C., Rahhal, T. A., & Poon, L. W. (1998). Things learned in early adulthood are remembered best. *Memory & Cognition, 26*, 3-19. doi:10.3758/BF03211366

Rubin, D. C., & Schulkind, M. D. (1997). The distribution of autobiographical memories across the lifespan. *Memory & Cognition, 25,* 859-866. doi:10.3758/BF03211330

Saachi, D. L., Agnoli, F. & Loftus, E. F. (2007). Changing history: Doctored photographs affect memory for past public events. *Applied Cognitive Psychology, 21*, 1005-1022. doi: 10.1002/acp.1394

Sahdra, B., & Ross, M. (2007). Group identification and historical memory. *Personality and Social Psychology Bulletin*, *33*, 384-395. doi: 10.1177/0146167206296103

Schönpflug, U. (2001). Cultural transmission – a multidisciplinary research field. *Journal of Cross-Cultural Psychology, 32*, 131-134. doi: 10.1177/0022022101032002001

Schönpflug, U. (2001). Intergenerational transmission of values: The role of transmission belts. *Journal of Cross-Cultural Psychology, 32,* 174-185. doi:10.1177/0022022101032002005

Schönpflug, U. (2009). *Cultural transmission: Psychological, developmental, social, and methodological aspects.* New York, NY: Cambridge University Press.

Schuman, H., Akiyama, H., & Knäuper, B. (1998). Collective memories of Germans and Japanese about the past half-century. *Memory*, *6*, 427-454. doi: 10.1080/741942611

Schuman, H., Schwartz, B., & D'Arcy, H. (2005). Elite revisionists and popular beliefs: Christopher Columbus, hero or villain? *Public Opinion Quarterly, 69*, 2-29. doi: 10.1093/poq/nfi001

Sperber, D. (1994). The modularity of thought and the epidemiology of representations. In L. A. Hirschfeld & S. A. Gelman (Eds.), *Mapping the mind* (pp. 39-67). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511752902.003

Svob, C. & Brown, N. R. (2012). Intergenerational transmission of the reminiscence bump and biographical conflict knowledge. *Psychological Science, 23,* 1404-1409. doi: 10.1177/0956797612445316

Svob, C., & Brown, N. R. (2014). *Characterizing historical and non-historical events from a parent's life*. Unpublished manuscript.

Svob, C., Brown, N. R., Reddon, J. R., Uzer, T., & Lee, P. J. (2014). The transitional impact scale: Assessing the material and psychological impact of life transitions. *Behavior Research Methods*, *46*, 448-455. doi:10.3758/s13428-013-0378-2

Swallow, K. M., Zacks, J. M., & Abrams, R. A. (2009). Event boundaries in perception affect memory encoding and updating. *Journal of Experimental Psychology: General*, *138*, 236-257. doi:10.1037/a0015631

Symons, C. S., & Johnson, B. T. (1997). The self-reference effect in memory: A meta-analysis. *Psychological Bulletin*, *121*, 371-394. doi:10.1037/0033-2909.121.3.371

Talarico, J. M., & Rubin, D. C. (2003). Confidence, not consistency, characterizes flashbulb memories. *Psychological Science*, *14*, 455-461. doi: 10.1111/1467-9280.02453

Tessler, M., Konold, & Reif, M. (2004). Political generations in developing countries: Evidence and insights from Algeria. *Public Opinion Quarterly, 68*, 184-216. doi:10.1093/poq/nfh011

Thomsen, D. K., & Berntsen, D. (2008). The cultural life script and life story chapters contribute to the reminiscence bump. *Memory*, *16*, 420-435. doi: 10.1080/09658210802010497

Thomsen, D. K., Pillemer, D. B., & Ivcevic, Z. (2011). Life story chapters, specific memories and the reminiscence bump. *Memory*, *19*, 267-279. doi: 10.1080/09658211.2011.558513

Tomasello, M. (2001). Cultural transmission: A view from chimpanzees and human infants. *Journal of Cross-Cultural Psychology*, *32*, 135-146. doi: 10.1177/0022022101032002002

Tulving, E. (1983). *Elements of episodic memory*. Oxford, UK: Oxford University Press.

Van Geert, P. (2009). Transmission, self-organization, and the emergence of language: A dynamic systems point of view. In U. Schönpflug (Ed.), *Cultural transmission: Psychological, developmental, social, and methodological aspects* (pp. 48-69). New York, NY: Cambridge University Press.

Volkan, V. (1997). *Blood lines: From ethnic pride to ethnic terrorism*. Boulder, CO: Westview Press.

Wagenaar, W. A., & Groeneweg, J. (1990). The memory of concentration camp survivors, *Applied Cognitive Psychology, 4*, 77-87. doi: 10.1002/acp.2350040202

Walker, W. R., Skowronski, J. J., Gibbons, J. A., Vogl, R. J., & Ritchie, T. D. (2009). Why people rehearse their memories: Frequency of use and relations to the intensity of emotions associated with autobiographical memories. *Memory*, *17*, 760-773. doi:10.1080/09658210903107846

Weingarten, K. (2004). Witnessing the effects of political violence in families: Mechanisms of intergenerational transmission and clinical interventions. *Journal of Marital and Family Therapy, 30*, 45-59. doi:10.1111/j.1752-0606.2004.tb01221.x

Welzer, H. (2005). Grandpa wasn't a Nazi: The Holocaust in German family remembrance. *International Perspectives, 54*. American Jewish Committee.

Wohl, M. J., & Branscombe, N. R. (2009). Group threat, collective angst, and ingroup forgiveness for the war in Iraq. *Political Psychology*, *30*, 193-217. doi: 10.1111/j.1467-9221.2008.00688.x

Yehuda, R., Bell, A., Bierer, L. M., & Schmeidler, J. (2008). Maternal, not paternal, PTSD is related to increased risk for PTSD in offspring of Holocaust survivors. *Journal of Psychiatric Research, 42*, 1104-1111. doi:10.1016/j.jpsychires.2008.01.002

Zacks, J. M., Speer, N. K., Swallow, K. M., Braver, T. S., & Reynolds, J. R. (2007). Event perception: A mind-brain perspective. *Psychological Bulletin*, *133*, 273-293. doi:10.1037/0033-2909.133.2.273

Zaromb, F., Butler, A. C., Agarwal, P. K., & Roediger III, H. L. (2014). Collective memories of three wars in United States history in younger and older adults. *Memory & Cognition*, *42*, 383-399. doi: 10.3758/s13421-013-0369-7

Zebian, S., & Brown, N. R. (2014). Living in history in Lebanon: The influence of chronic social upheaval on the organization of autobiographical memories. *Memory, 3*, 194-211. doi: 10.1080/09658211.2013.775310