

Public events and the organization of autobiographical memory: An overview of the living-in-history project

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In this article, we summarize a cross-national research programme, the Living-in-History Project, investigating the impact of war, terrorism and natural disaster on the organization of autobiographical memory. More specifically, the aims of this project were: (a) to develop a method for assessing the impact of public events on autobiographical memory; (b) to determine whether there are systemic group differences in the relationship between these two types of knowledge; and (c) to identify factors that are present when personal memory and historical memory become intertwined. This method was used to collect data from 18 samples located in nine countries. We conclude that wars (e.g. the civil war in Bosnia; World War II) and natural disasters (e.g. the Izmit Earthquake) spawn Historically defined Autobiographic Periods (H-DAPs), but terrorist attacks (e.g. 9/11, the Second Intifada) and nonviolent political upheaval (the fall of the Soviet Union) do not. We also conclude that autobiographical memory and historical memory are interrelated only when public events dramatically alter the *fabric of daily life*, for a population, for an extended period.

Keywords: collective memory; autobiographical memory; lifetime periods; historically defined autobiographical memory

Historically significant public events affect memory in three quite different ways: first, we sometimes remember the details of the event itself (Booth, 1970; Findahl & Hoijer, 1985; Schuman & Scott, 1989); second, we sometimes remember the context in which we learned about an event and/or the situations in which the event was discussed or considered (Brown, 1990; Brown & Kulik, 1977; Conway et al., 1994; Hirst et al., 2009); third, public events sometimes organize autobiographical memory, acting as temporal landmarks and providing the thematic content which defines the period (Brown et al., 2009). To take a concrete example, consider the terrorists attacks of 9/11. Much evidence has accumulated indicating that Americans know a reasonable amount about 9/11 and that they often remember where they were when they first learned about the attacks (e.g. Hirst et al., 2009; Lee & Brown, 2003; Pezdek, 2003). At the time, it also seemed possible that ‘9/11 changed everything’ (Dunmire, 2009) and that the USA as a nation and the American people as individuals had entered a new era – the Post-9/11 Era.

In this article, we consider the empirical implications of this widely held belief and describe a research project – the Living-in-History Project – that has made it possible

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to test them. The project itself has a more general aim: it is concerned with understanding when and why significant public events create and delineate *Historically Defined Autobiographical Periods* (H-DAPs). This is an important issue because the presence of H-DAPs indicates that the sampled population includes many people who have been ‘living in history’. In contrast, their absence indicates that public events, even very important ones, have had at most a modest effect on people’s day-to-day lives. On this view, H-DAPs appear in a population when personal events and/or contexts in which they are played out are directly affected by contemporaneous public events.

In the next section, we describe the theoretical considerations that motivated us to hypothesize the existence of H-DAPs and to anticipate that they would be present in some populations but not others. We then describe the method we developed to test for the presence of H-DAPs and consider its strengths and weaknesses. In the third section, we provide a summary of our research findings and in the process present a detailed characterization of the *Living-in-History* (LiH) effect, which we take as evidence for the presence of H-DAPs in a sample. In the fourth section, we focus on terrorism and attempt to explain why the LiH Effect was absent from samples collected in the USA and Israel. We conclude by considering reasons why H-DAPs might differ from conventional self-defined autobiographical periods and discuss the relationship between this project and collective memory research.

We should note that this article reviews material presented in a prior study (Brown et al., 2009) and expands upon it in several ways. In particular, we consider the implications of eight data sets not presented in this earlier treatment; we elaborate on several key concepts (e.g. fabric of daily life); and we consider how our method and the effects it yields may inform an understanding of terrorism, trauma and group identity.

Organization of autobiographical memory: lifetime periods and landmark events

Researchers who study autobiographical memory generally agree that *lifetime periods* play an important role in organizing personal memories (Conway, 2005). A lifetime period is a high-level memory structure which subsumes personal memories laid down during some span of time. In addition, these structures are assumed to be bound by landmark events (Shum, 1998) and to coordinate period-specific generic knowledge. For example, high school memories and general knowledge about high school (e.g. names and personalities of classmates and teachers, the building layout, courses taken, grades awarded) should be organized by one lifetime period, the high school period; college memories and college-related general knowledge should be organized by another, the college period. Given these two periods, we would expect high school graduation, arrival on campus for freshman year and college graduation to serve as important landmark events.

It is useful to think about lifetime periods in terms of the *fabric of daily life*. This term is intended to capture the notion that there are many aspects of a person’s life which remain more or less constant for long stretches of time. These include a person’s work and domestic environment, his or her social network, recreational activities, consumption habits, etc. These components play a role – sometimes central, sometime peripheral – in most of the memorable personal events that occur during a given lifetime period. On this view, a lifetime period represents a span of time during which there is a fair degree of stability and continuity in one’s material, social and

occupational circumstances; there is uniformity to the fabric of daily life. From this perspective, landmark events are important because they signal and/or cause a marked change in these circumstances. In other words, these events alter the fabric of daily life in significant ways, and in so doing bring to a close one lifetime period and/or set the stage for the next.

Transitions from one lifetime period to the next come in many forms (Berntsen & Rubin, 2004; Thomsen & Berntsen, 2008). Some are normative, predictable and temporally prescribed (e.g. graduating from high school); other are normative, but show more temporal variability (e.g. marriage, retirement); still others are temporally unrestricted and may come about by chance (e.g. a major illness; a lottery win) or may require considerable planning and preparation (e.g. emigration; a career change). Regardless of their nature, what these transitions have in common is their specificity. In general, a transition affects only a small number of people – an individual, a family, at most, a single age cohort (e.g. high school graduation). As a result, the organization of autobiographical memory at the level of lifetime periods is necessarily idiosyncratic.

At the outset of this research programme, we recognized that public events, particularly calamitous ones, can have profound and sometimes enduring effects on the fabric of daily life. For example, both wars and natural disasters often produce extreme economic hardship, social disruption and psychological distress, and these negative consequences can be both widespread and long-lasting (Blaikie, Cannon, Davis, & Wisner, 1994; Levy & Sidel, 1997; McNally, 2003). Within the current framework, such events are potentially transitional as they can bring about an end to an existing way of life and sometimes initiate new ones. It follows that impactful public events should also spawn corresponding lifetime periods across the affected population. We refer to such lifetime periods as historically defined autobiographical periods to reflect the idea that they are created and defined by public events, which are often of historical significance, and also to suggest that these lifetime periods are likely to be synchronized across an affected population.

A method for studying H-DAPs

We have developed a two-stage procedure to test for the presence of H-DAPs in a sampled population. During Phase 1, participants are presented 20 neutral cue words (*automobile, bag, ball, book, box, bread, chair, coat, dog, pencil, piano, pill, radio, river, snow, spoon, stone, street, tree, window*) one at a time in random order; their task is to respond to each word by recalling (in writing) the memory of a specific cue-related autobiographical event. We used the word-cue task because it is known to produce a representative sample of the contents of autobiographical memory, a sample that provides exhaustive, if not uniform, coverage of events across the lifespan (Brown & Schopflocher, 1998; Crovitz, & Schiffman, 1974; Rubin, 1982; Rubin & Schulkind, 1997).

During Phase 2, participants receive their Phase 1 memories and are required to think aloud as they date each of them. In general, people estimate dates by recalling facts associated with the to-be-dated event and use these facts to support temporal inferences. In other words, event dates are typically *reconstructed* (Brown, 1990; Friedman, 1993; Thompson, Skowronski, Larsen, & Betz, 1996). When researchers examine information used to reconstruct dates, they find that people often make reference to personal periods (e.g. ‘when I was in high school’) and period-bounding

landmark events (e.g. ‘after we moved to Alberta’). By extension, we would expect to find frequent references to H-DAPs and period-defining news events in protocols collected from people whose lives have been shaped (and whose memories are organized) by historically significant public events.

Phase 2 protocols are recorded and then coded so that each can be assigned to one of five categories (see Table 1). A protocol is considered *unjustified* when participants give a date estimate but provide no additional information. Conversely, protocols are considered *justified* when they include supporting information. There are four types of justified responses. *Personal/generic* responses include information about events, periods, people, places and activities specific to the participant’s life and/or general temporally relevant information. Protocols that include references to historical periods and unique news events of a political, military and/or economic nature are classified as *historical* responses. The *pop/sports/weather* category is evoked when a response includes a reference to a unique popular-cultural event, a specific sports event, or an extreme or unusual weather occurrence. On occasion, protocols include both historical and personal/generic information. When this happens, they are initially assigned to the *historical-personal* category, but for present purposes, are treated as historical responses. Likewise, protocols that include both personal/generation information and pop/sport/weather references are treated as pop/sports/weather responses.¹

In brief, we use the prevalence of the historical references in the dating protocols as an index of the degree to which historically significant public events affect people’s lives. When these references are common, we say that we have observed the Living-in-History Effect. When the LiH Effect is present, we infer that public events have had a direct and forceful effect on the sampled population; when it is absent, we infer the opposite. We recognize that an indirect approach like this one is not without its problems. For example, the Phase 1 task might simply fail to cue events from an existing H-DAP. Or, participants may avoid reporting painful memories associated with periods of upheaval. In either case, the data might underestimate the degree to which the people in a sample were affected by external events.

Despite these potential problems, the two-phase method used in this research programme does have clear advantages over other methods used to study history and memory. In particular, it minimizes judgement processes and self- and group-presentation issues that may bias performance when people are asked to rate or recall important public events (e.g. Behr & Iyengar, 1985; Nourkova, 2008; Schuman & Rogers, 2004; Schuman & Scott, 1989).

With the two-phase method, we assume that participants are focused on producing an accurate date estimate and attempt to do so with a minimal amount of effort. We also assume that facts retrieved in the course of dating an event are evaluated solely on the basis of whether they are temporally informative. Given these assumptions, it seems unlikely that an individual, even an individual who is invested in a particular group-based understanding of the recent past, would shift from a personal temporal framework which is relative easy to use to a public one which is not. It remains to be seen how the results produced by this method relate to those produced by other more direct methods that have been used to study collective memory.

The Living-in-History Effect

So far, we have argued that dating protocols can index the impact of public events on private lives; references to public events and historical periods should be common

Table 1. Examples of reported memories, dating protocol and their assigned content categories.

Cue →	Phase 2			Response type	Sample
	Phase 1	Reported memory →	Verbalized date estimates		
Chair	I bought chairs when I was replacing the furniture in the apartment	That was approximately last year in January. That's it	Unjustified	Bosnia–Herzegovina	
Radio	I took the radio outside while I read a magazine	And that would have been in July of this year	Unjustified	Canada	
Pill	I took a pill that make me sick for a week	That was after my wisdom teeth pulled when I was 21, which puts me at 84, 94, 95 ... That was in the spring too. I'm trying to figure out what part of the year it was. I'll guess May. What year did I say? 1995	Personal/generic	Michigan, USA	
Piano	My friend John showing me 'Shimmy shimmy ya' on the piano	Um, this was right when the song 'Shimmy shimmy ya' came out. I must have been in 7th grade so that was ... '96, and around the beginning of school again so September	Personal/generic	New York, USA	
Spoon	We got a set of silver spoons from nana	We got it after war and war lasted until '96. I came to Sarajevo in ... I couldn't go first. First my mom went, so '97, it was second year after war. We go to Sarajevo in fall, so the month was September or October of '97	Historical only	Montenegro	
Pill	When my mom took a sedative pill	This was also during war times. It was during those fearful times and all that horror. 1995 maybe, though it happened throughout all those years. I remembered that one specific night when it was the worst. Month I can't remember. I have no idea. Any one, April?	Historical only	Montenegro	
Coat	Airing my mother's coat	That was when we were moving things, '98, or '99 and spring time. March, '98. Well in '99 the war started so it was probably before then	Historical and personal/generic	Serbia	

Table 1. (Continued).

	Phase 1	Phase 2	Response type	Sample
Cue →	Reported memory →	Verbalized date estimates		
Pencil	I lost my favourite pencil	A year before the war, no, no, the year the war started, '91, no, '92 actually, when a grenade fell into my room, that's when I lost that pencil. What month was that? April, May, May that's when shelling started	Historical and personal/generic	Bosnia–Herzegovina
Dog	I first saw my dog when she was still in a cardboard box as a puppy	Freakishly I can tell you instantaneously this was January 18th 1986. It was a record breaking warm day, I had just gone on a 5 mile bike run that I should not have gone on. I should have been punished	Pop/weather/sports	New York, USA
Bag	When I bought my multi-colour bag	Umm I bought this at the fringe festival I think the second year I went, I buy something every year I go. I think I bought this one the second year ... and the first year that I went was in 1997 ... so the second year would be 1998 and the fringe festival is always the end of July and the beginning of August. I think it probably was in July. So July 1998	Pop/weather/sports	Canada
Automobile	I remember backing into a parked car in a parking lot in Kryat Shmona	That was in my army days. That was after I was second lieutenant so that would be 10 months before I got out the army. Which is November 2002. So January 2002. I guess it was around I got the licence like a month after I guess it was around February 2002	Military service	Israel
Radio	Turned the radio on when the volume was as high as possible without knowing it is that way	That was I think 3 years ago 'cause I was in the army. Maybe 4 years ago ... Sorry thinking then how loud it was. Cause I was in the army I think it was 4 years ago, and I think it was February	Military service	Israel

where public events have had a pronounced effect on the way people live; otherwise, they should be rare. It follows that we should be able to identify conditions that spawn H-DAPs in an empirical manner by examining dating protocols collected under many different conditions.

To this end, we have collected protocols from 18 samples. Ten of these were described in a recent article (Brown et al., 2009), in which we presented data from: Sarajevo, Bosnia–Herzegovina; Belgrade, Serbia; Podgorica, Montenegro; Izmit, Turkey; Ankara, Turkey; New York City, NY, USA; Ann Arbor, MI, USA; Jerusalem, Israel; Aalborg, Denmark; Edmonton, AB, Canada. Across these 10 groups, the sample size ranged from 23 participants to 28. In all cases, participants were 20–30 years of age when the data were collected; all were long-time residents of the cities where the data were collected; and all had at least one-year of post-secondary education. More recently, we obtained two additional samples from Sarajevo, Bosnia–Herzegovina: one provides data from a cohort that was older than the one originally tested and the other from a cohort that was younger. We also now have data from World War II generation Dutch, Danish, American and Canadian non-combatants (Hansen, Brown, Vanderveen, Conrad, & Lee, 2009), and we have a data set collected in Moscow from Russians who were entering adulthood as the Cold War was coming to an end.²

Data from these 18 samples supports the following claims:³

1. *H-DAPs are the exception rather than the rule.* This can be seen in Figure 1, which displays data collected in Canada and Denmark, two relatively conflict-free countries. In both samples, more than 95% of the responses were dated with references to personal/generic information, whereas historical references appeared in only 1% of the Canadian protocols and in none of the Danish ones.
2. *H-DAPs are formed in people who have lived through intense and/or prolonged conflict.* Figure 2 (left column) provides a graphic illustration of this point. Across the three samples, we found that 20% of justified date estimates were made with reference to the civil war, the siege of Sarajevo, or other public events associated with the civil war. We also found that H-DAP references were common among World War II generation Dutch and Danes (but uncommon among World War II generation Canadians and Americans).
3. *Major natural disasters also spawn H-DAPs in the affected population.* Support for this claim comes from Izmit, Turkey (Figure 3). In August 1999, Izmit (a city of approximately 2.5 million) experienced a major earthquake (7.6 on the Richter scale) which killed over 17,000 people and left approximately 600,000 homeless. The protocols collected in Izmit during the early part of 2006 indicated that people from this city frequently referred to the quake when dating personal events, particularly when those events occurred within a year or two of the disaster. In this sample, 14% of the justified date estimates included earthquake references.
4. *H-DAPs are formed in children who have lived in conflict zones as well as teenagers and young adults.* This point is illustrated by the three Bosnian data sets, which are presented in the left column of Figure 2. The data in the top panel were collected from people who were between 5 and 9 years old when the civil war began in 1992; data in the middle panel were collected from people who were between the ages of 10 and 19 in 1992; and data in the bottom

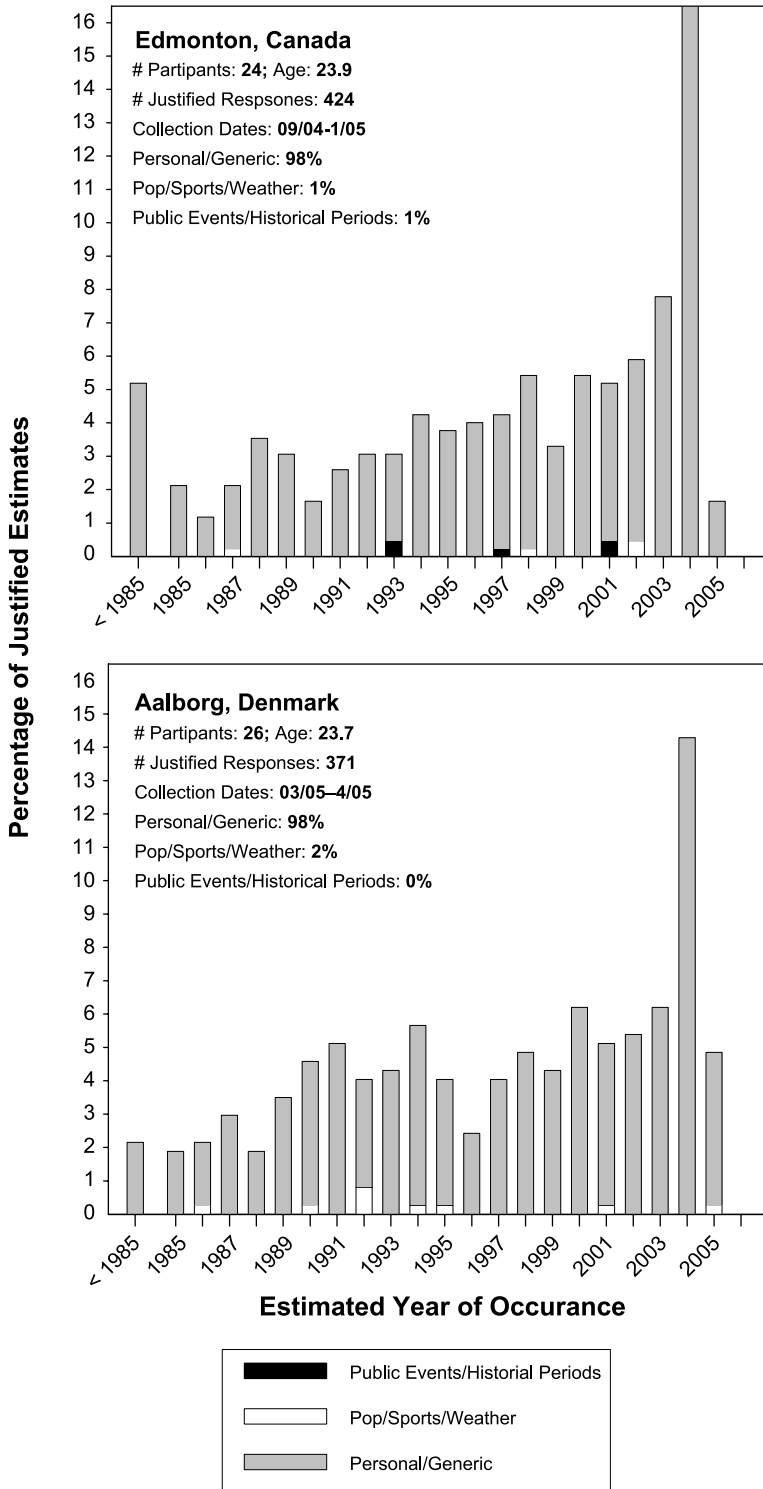


Figure 1. Percentage of justified responses as a function content category and estimated year of occurrence, for Canada and Denmark.

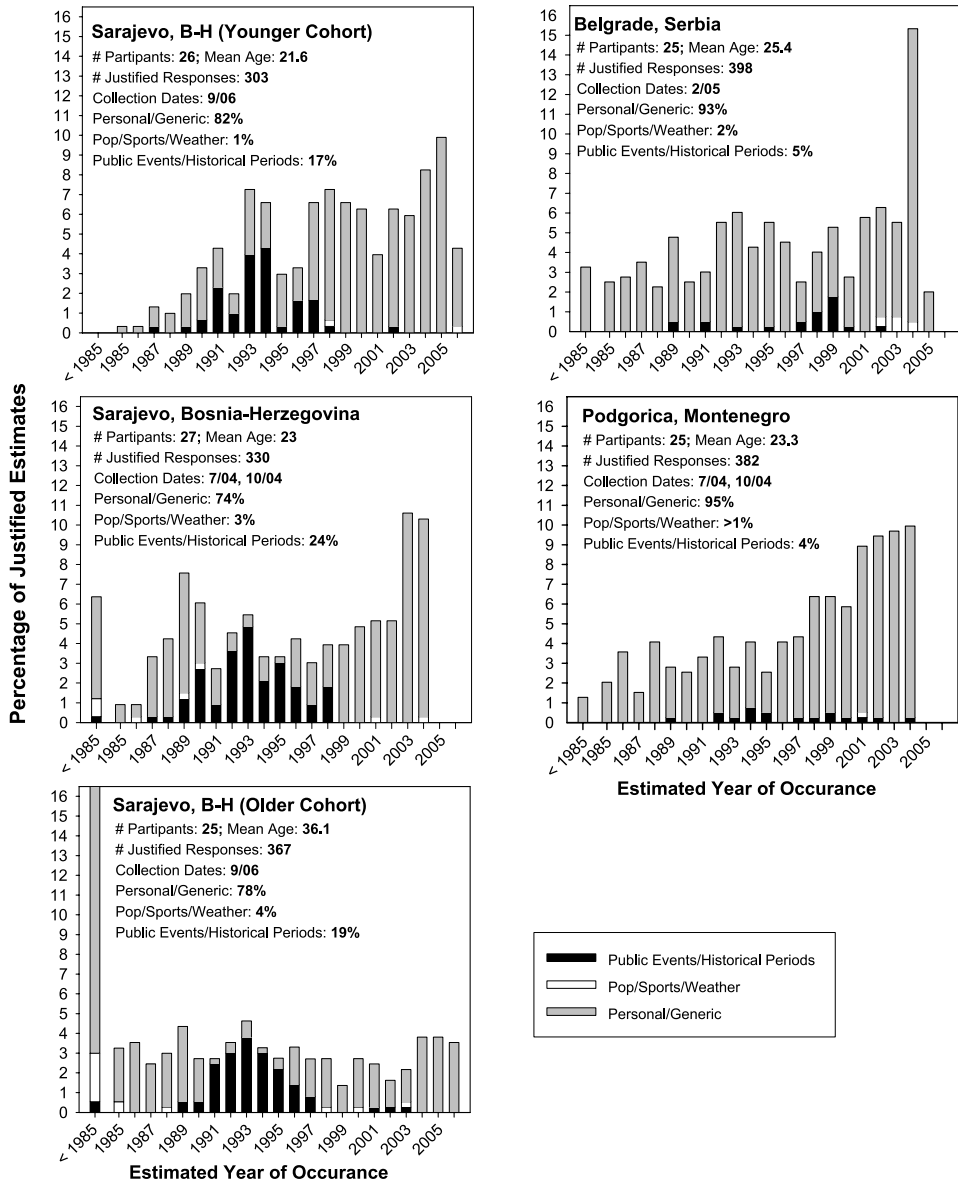


Figure 2. Percentage of justified responses as a function content category, estimated year of occurrence, for Bosnia–Herzegovina (left column) and Serbia, and Montenegro (right column).

panel were from people who were between the ages of 19 and 26 in 1992. In all three groups, participants often mentioned H-DAP-related information when dating personal events; historical references were present in 17% of the justified dating protocols provided by the youngest group, 24% of those provided by the middle group and 19% of those provided by the oldest group. Interestingly, when we restrict our attention to the war years (1992–1995), H-DAP references are more common in the oldest (85%) and the middle groups (81%) than they are in the youngest group (51%).

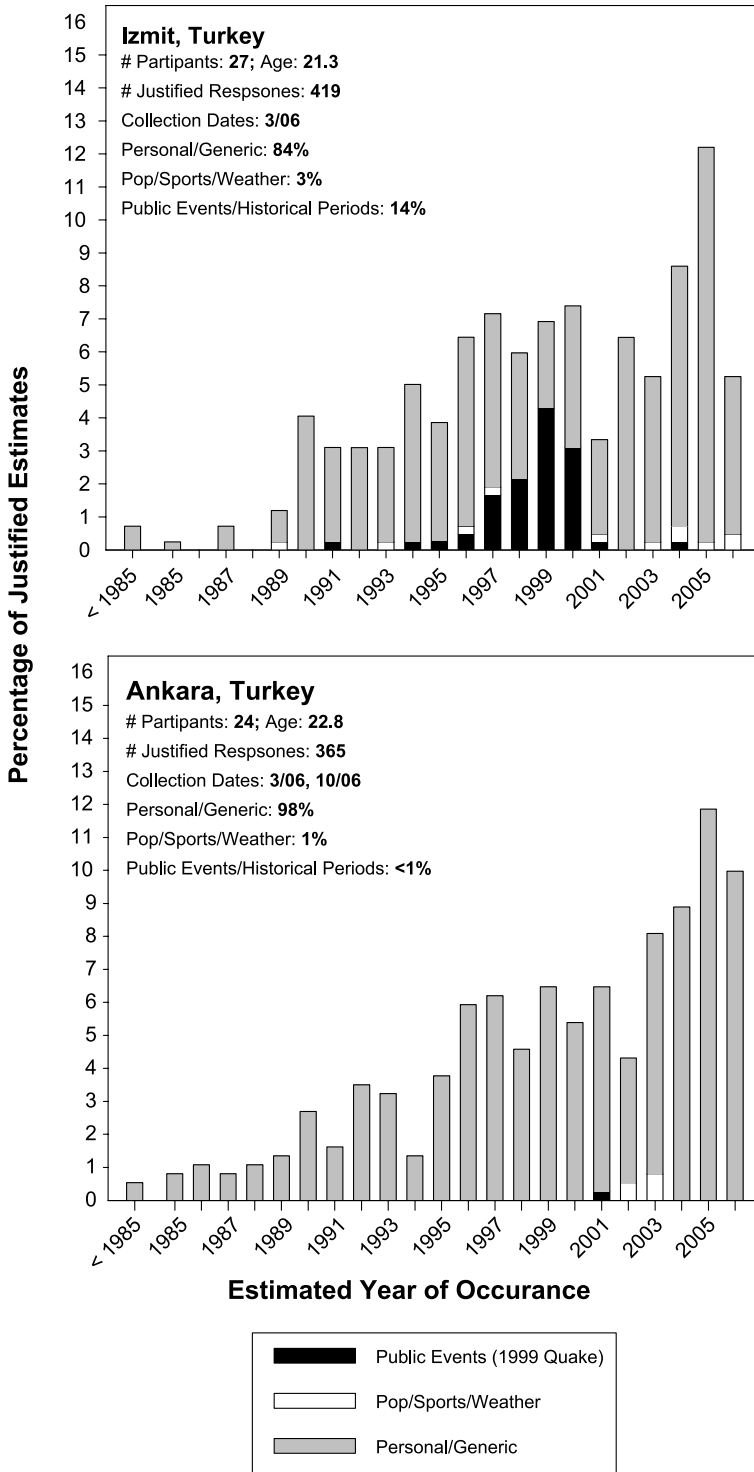


Figure 3. Percentage of justified responses as a function content category and estimated year of occurrence, for Izmit and Ankara.

5. *Once formed, H-DAPs last a lifetime.* Evidence for this claim comes from the World War II data sets, which indicated that our participants were still using World War II as a temporal landmark in 2005 and 2006. For example, H-DAP references appeared 13% of the time when participants from the Dutch sample justified their date estimates.
6. *The LiH Effect is temporally limited.* When people use H-DAP references to date personal events, these references are not spaced in a uniform way across the lifespan. Instead, they appear in protocols when people date personal events that happened at about the same time (plus or minus a few years) as the H-DAP generating public event (see Figures 2 and 3).
7. *The LiH Effect is intensity graded.* This is true in two senses. First, H-DAPs are most common *when* the H-DAP generating events are most intense. For example, in the Sarajevo samples, H-DAP references were most common when people were dating events from 1993, which was the year during which the civil war was at its most destructive. Likewise, in Izmit, references to the earthquake were more common for events that took place in 1999 than they were for events from any other year. Second, H-DAP references are most common *where* the H-DAP generating events are most intense. For example, in the Balkans, the LiH Effect was much more pronounced in Bosnia–Herzegovina than it was in Serbia or Montenegro. This parallels the historical record which indicates that the civil war in Bosnia was longer and more destructive than the various forms of collective upheaval affecting Serbia or Montenegro (Human Rights Watch, 2000; Tabeau & Bijak, 2005). Likewise, in Izmit, Turkey, there was a strong LiH Effect, whereas the effect was absent in Ankara, a city located 250 km to southeast.
8. *Political upheaval does not produce a robust LiH Effect.* Evidence for this claim is provided by the data sets we collected in Belgrade, Serbia (see Figure 2) and Moscow, Russia. Serbs mentioned public events and historical period in only 5% of their responses and most of these references concerned the Kosovo War of 1999. In Moscow, historical references were also present in 5% of the justified date estimates, but less than half of these concerned the demise of the Soviet Union or the creation of the Russian Federation.
9. *Terrorist attacks do not create H-DAPs.* The two US samples were collected to determine whether the changes resulting from the 9/11 attacks were sufficiently impactful to foster the creation of H-DAPs in proximate populations (New York City, NY) and distant ones (Ann Arbor, MI). Data were collected in Jerusalem to determine whether the Second Intifada (which involved over a 100 suicide attacks on civilian targets) and/or recent military experience created H-DAPs in young adults in Israel. As is apparent from the data plotted in Figure 4, participants from these three groups almost never mentioned public events or historical periods when dating personal events. In other words, it appears that terrorist attacks do not create H-DAPs, regardless of whether they are exceptional or chronic. Because this null conclusion is a surprising one, we discuss it at length in the next section.

Terrorism and the LiH Effect

In the last section we claimed that terrorism does not create H-DAPs. Admittedly, this claim is based on only three samples, one collected in Israel and two in the USA. Although counter-intuitive, this claim and the findings on which it is based are

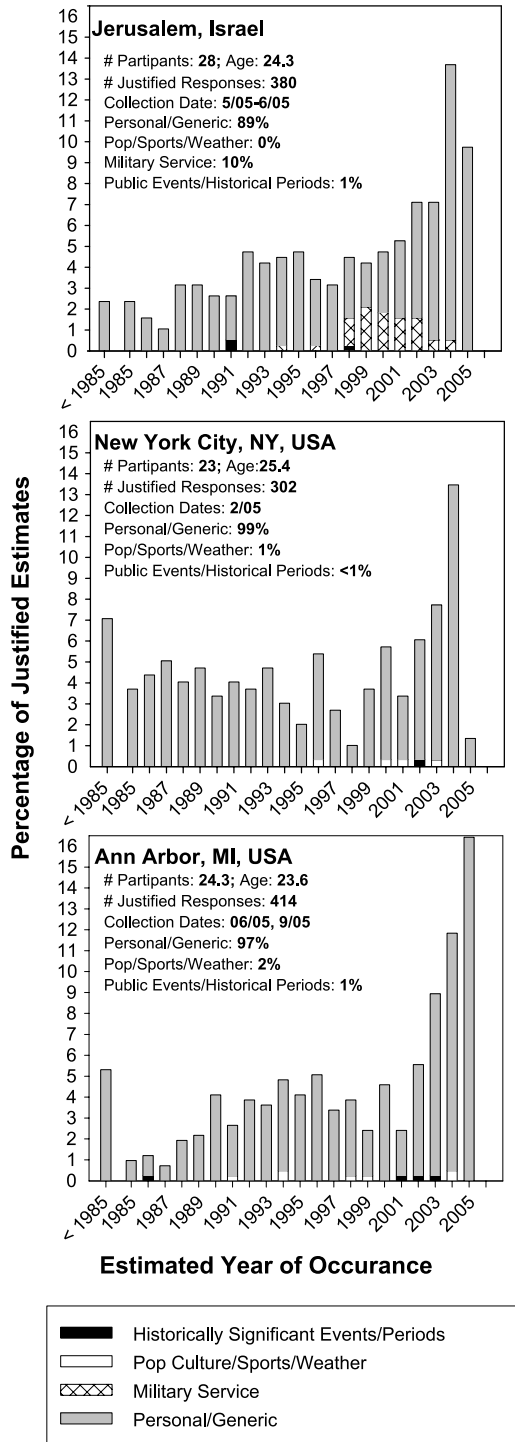


Figure 4. Percentage of justified responses as a function content category and estimated year of occurrence, for Jerusalem, Israel, New York City, NY, USA, and Ann Arbor, MI, USA.

consistent with our current understanding of how and why public events come to organize autobiographical memory. Specifically, the research summarized above indicates that historically significant public events spawn H-DAPs, and hence provide the conditions for observing an LiH Effect only when these events bring about a dramatic and long-lasting change in the fabric of daily life. This position implies that terrorist attacks will generally fail to create H-DAPs because they do not produce a marked, enduring change in the way that people live.

This account fits both the American and the Israeli data, but in different ways. It is indisputable that 9/11 had a profound and immediate effect on the USA as a nation. These effects are easily seen in the military actions and foreign policies undertaken by the Bush administration following the attacks and in the domestic politics it pursued. In contrast, the effect of 9/11 on the average American was quite limited. It is true that the attacks produced a strong emotional reaction in many Americans, that there was an increase in mental health-related problems following 9/11, and that 9/11 influenced the way Americans perceived the world and their role in it (Galea et al., 2003; Li & Brewer, 2005; Richman, Cloninger, & Rospenda, 2008; Schuster et al., 2001). However, it is also true that these effects tended to fade within a year or two (Knudsen et al., 2005). More importantly, the material circumstances that defined how people live were much the same after 9/11 as before (United States Department of Labor Statistics, 2002).⁴

The terrorist attacks associated with the Second Intifada also failed to produce H-DAPs. We believe that the reason for this is that these attacks also failed to put an end to one way of life and bring about another. This is not to say that life in the USA is the same as life in Israel. Indeed, there is an obvious difference between the two societies that may be relevant here. In contrast to the USA, domestic security in Israel has been a constant concern for generations, and these concerns have long since been woven into the fabric of daily life. Because Israeli society has been shaped by group conflict, it seems more likely that a spate of attacks would produce a change in the frequency of certain behaviours (e.g. use of public transport) rather than a wide-ranging qualitative change in the way that people live.

In brief, we contend that the LiH Effect is absent from the USA samples because 9/11 and the wars that followed had a limited effect on the daily lives of most Americans; for most Americans, 9/11 caused a brief emotionally unpleasant disruption – a disturbing interlude – in their on-going activities. However, those activities were resumed, essentially unaltered, within days if not hours of the attacks. An LiH Effect is absent in Israel because security concerns related to variable levels of group conflict are intrinsic to the Israeli lifestyle. Israelis may have taken additional precautions as result of the attacks associated with the Second Intifada, but they were also obliged to carry on with their daily activities.

Although the LiH Effect was absent in the USA and Israeli samples, we do believe that terrorism (and other forms of chronic low-level group conflict) can produce H-DAPs in some populations. However, we expect that this will happen only when certain conditions are met. First, there must be a transition from a (relatively) conflict-free state of affairs to a violent one. Second, civilian-directed violence and the security concerns it engenders must be disruptive, invasive and long lasting. Third, when the conflict ends, the lives of most people must be very different from the ones they lived before and during the conflict. If this position is correct, we should be able to predict the presence of H-DAPs in some populations and their absence in others. For example we might find an LiH Effect in Belfast, Northern Ireland, but not find it in London, England.

Conclusion

The goal of the present research programme is to understand how, when, and why history and autobiographical memory become entwined. To this end, we developed the two-phase method described above and have used it to collect data from 18 samples. These samples were gathered in nine countries from people as young as 19 years old and as old as 86. From these data, we have concluded that historically significant public events sometimes serve to organize autobiographical memory, but that this happens only when external events bring about widespread, profound and enduring changes in the fabric of daily life.

Although the research has provided a firm basis for this conclusion and appears to support a number of secondary ones as well, many issues remain. We close by considering two of these. First is whether there is something special about the psychological and/or social processes that create H-DAPs and enable their persistence across the lifespan. It could be that the processes that create H-DAPs are the same as those that create lifetime periods. We assume that lifetime periods are bounded by major transitions. Under normal circumstances, these transitions are (usually) under one's control and generally impact a single person or a small group of people.

H-DAP formation also seems to be driven by transition-creating events. However, in contrast to changes that mark off personally defined lifetime periods, transitions that produce H-DAPs are caused by external events which are usually very negative (i.e. wars, natural disaster), and often are experienced by a large number of people simultaneously. These facts raise the possibility that (a) the formation of H-DAPs is in some way trauma related, and that (b) their persistence serves a social/communicative function. If the former is the case, then individual differences in the magnitude of the LiH Effect should correlate with various trauma measures (e.g. scores on the PTSD Checklist, Norris & Hamblen, 2004);⁵ if the latter is the case, the LiH Effect should be more pronounced when experimenters are drawn from the participant's community than when they are not.

A second issue concerns the relationship between the H-DAPs and collective memory (Halbwachs, 1992; Olick, 1999; Pennebaker, Paez, & Rimé, 1997). Elsewhere (Brown et al., 2009), we have drawn a distinction between two types of historically significant public events: *emotionally charged events* and *epoch-defining* ones. Emotionally charged events affect how people feel and what they believe, but do not alter their lives in fundamental ways. In contrast, epoch-defining events change the way people live, and as a consequence spawn H-DAPs. We have also speculated that only epoch-defining events are likely to play 'a central role in defining, altering, and augmenting group identity as it unfolds over time' (p. 403). On this view, people who have been directly affected by epoch-defining events function as sort of 'Generation 0' for collective memory. It is possible that people from these *historical generations* (Tessler, Konold, & Reif, 2004) will communicate their group-relevant experiences and beliefs to the next generation, and in so doing, shape an understanding of a collective past. If so, we can use the presence of an LiH Effect in a sampled population as to predict intergenerational transmission. For example, our data suggest that the next generation of Americans will have little knowledge of or interest in the attacks of 9/11; that the Siege of Sarajevo will be incorporated into the Bosnian understanding of the world; and that over time, Serbs and Bosnians will come to have very different perspectives on the Balkan wars of the 1990s.⁶

To conclude, we now know that historically significant public events come to organize autobiographical memory, but only when they have had a dramatic impact on in the fabric of daily life for most of the people in the affected population. Our current challenges are (a) to gain a better understanding of the cognitive, affective and social processes that create and maintain H-DAPs and (b) to determine whether our ability to identify populations that have been ‘living in history’ can be used to advance an understanding of collective memory and group conflict.

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Notes

1. We found it necessary to create a unique category for the Israeli sample, *military service*. We distinguish these responses from historical ones because they reflect an important aspect of the Israeli life script (which involves near universal conscription) rather the public events of the day.
2. We thank Veronika Nourkova for sharing these data with us.
3. Of course, these claims are inductive generalizations, which have received differing degrees of support from the samples described. As such, we recognized that additional findings may cause us to revise or discard one or more.
4. It seems very likely that 9/11 had a profound effect on the lives of certain Americans (e.g. the families of people who died in the attacks, residents of lower Manhattan, servicemen and their families, airline and security company employees, etc.), and we would expect to find that 9/11 serves as a landmark event for many people in these subpopulations. However, our data do suggest that the percentage of Americans whose lives were directly and profoundly affected by the events of 9/11 may be quite small.
5. However, there are reasons why correlating cross-national differences in trauma-related illnesses and the prevalence of H-DAPs is, at best, difficult. First, are inherent problems collecting accurate cross-national data since measured prevalence is also correlated with (a) differences in access to diagnostic facilities by trauma sufferers, and (b) differences in the capacity for health professionals to collect data during and after different cataclysmic events. Second, it is difficult to identify and control for factors unrelated to H-DAP formation but related to differences in psychological trauma. For example, Pevalin and Robson (2007) report higher rates of PTSD for Bosnian Serbs in Republika Srpska than either Croats or Bosniaks in Bosnia–Herzegovina, but also point out that underlying causes also differed between regions. Moreover, within group variation was also found to be much larger than between groups, making it unlikely that significant statistical differences could be found even when they exist. Third, cross-national comparisons are confounded by cultural and historical differences, such as the presence or absence of torture, past psychiatric history and current illnesses, and the quality of aid available during and after trauma inducing events (De Jong et al., 2001).
6. Although there is as yet no direct evidence concerning this point, Schuman and his colleagues have conducted a series of studies that provide data that is at least consistent with it (Schuman, Akiyama, & Knäuper, 1998; Schuman & Rogers, 2004). In these studies, survey respondents of various ages were asked to name at least one important historical event from the past 50 or 60 years. This research indicates that older Japanese and Germans were much more likely to mention to World War II than were their American counterparts; the war was mentioned by about 90% of World War II-generation Japanese, by about 75% of World War II-generation Germans, and by about 40% of World War II-generation Americans. Consistent with the notion that intergenerational transmission is related to the impact of historical event on the generation that experienced it, these studies also indicate that Japanese and Germans of the post-war generations were more likely to give World War

II as a response than were post-war generation Americans; World War II was mentioned by about 35% of the younger Japanese and by about 25% of younger Germans; for the younger Americans, the figure is about 15%.

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