Refugee Status Determinations and the Limits of Memory

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Abstract

Refugee status decision makers typically have unreasonable expectations of what and how people remember. Many assume that our minds record all aspects of the events that we experience, and that these memories are stored in our brains and remain unchanged over time. Decades of psychological research has demonstrated, however, that our memories are neither so complete nor so stable, even setting aside the effects on memory of trauma and stress. Whole categories of information are difficult to recall accurately, if at all: temporal information, such as dates, frequency, duration and sequence; the appearance of common objects; discrete instances of repeated events; peripheral information; proper names; and the verbatim wording of verbal exchanges. In addition, our autobiographical memories change over time, and may change significantly. As a result, while gaps or inconsistencies in a claimant’s testimony may in some cases properly lead to a negative credibility finding, such aspects are often misleading and should never be used mechanically, and the bar must be set much lower. Many decision makers must fundamentally readjust their thinking about claimants’ memories if they are to avoid making findings that are as unsound as they are unjust.

1. Introduction

‘A refugee claim should not be determined on the basis of a memory test’.1

Refugee status decision makers typically have unreasonable expectations of what and how people remember. Members of the Refugee Protection Division of Canada’s Immigration and Refugee Board (IRB/the Board), for example, often subscribe to the common lay notion that ‘Memory is like a video recording of your observations that can be played back at will to remind you of what you saw’.2 Yet, even setting aside the effects

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1 Sheikh v. Canada (Minister of Citizenship and Immigration) [2000] FCJ No. 568 at para. 28 (Federal Court of Canada).

on memory of trauma and stress, decades of research has established beyond any doubt that human memory is nothing like a video recording, that it is neither as complete nor as stable as this folk theory implies. As a result, decision makers far too often make findings that are as unsound as they are unjust.

The first section of this article highlights common failures of memory that are relevant to the refugee determination process: memory for time (dates, duration, frequency and sequence); common objects; repeated events; peripheral information; names; and verbatim memory. The second explores how memory changes over time, and concludes by noting that the test conditions at the IRB likely contribute to the inconsistency of claimants’ memories. Although the examples throughout are taken from Canada’s refugee determination system, the points made apply equally to the refugee determination systems of other countries.

2. Availability/Accessibility

Certain categories of information are not encoded in our memories, or are encoded but are not easily accessed. In reconstructing our memories of events, we have trouble recalling such information accurately, if at all.4

2.1 Time

After many years of studies, researchers agree that in remembering we have access to ‘very little temporal information’.5 There is no question that we can remember events in considerable detail and still have only a vague idea of when they happened, or how often, or for how long, or in what order.

2.1.1 Dates

When we remember an event, our ability to assign a date to it is nearly always based on ‘inference, estimation and guesswork’.6 With enough

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3 Although this is a vast topic beyond the scope of this article, it is worth noting that the gaps and changes described below, and characteristic of memory in general, will typically be amplified when psychologically vulnerable people remember and relate upsetting experiences, especially under stressful circumstances. For a review, see, J. Herlihy & S. W. Turner, ‘The Psychology of Seeking Protection’ (2009) 21 IJRL 171-92; J. Cohen, ‘Errors of recall and credibility: Can omissions and discrepancies in successive statements reasonably be said to undermine credibility of testimony’ (2001) 69 Medico-Legal Journal 25-34.

4 Psychologists theorize that we reconstruct our memories each time we bring them to mind: ‘Recent memory theory suggests that memories are not stored units of information, as we used to think, but that the recall of events and information is a process of reconstruction’. Herlihy 2009, above n. 3, 179.


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clues to the correct answer', 7 we may be able to reconstruct when the event must have taken place, 8 but since our guesses are only as good as our clues, they are often not very good at all. In fact, as study upon study have shown, ‘the dates that individuals assign to their past events are rarely accurate’. 9

Several studies have suggested that our ability to date autobiographical events may be stronger than for other types of events. 10 Even so, when people are asked to keep diaries for four months, for example, and are then asked at the end of those four months to date the events that they have described, they are regularly off by up to three months. 11 In one study, when subjects were asked, after three months of recording their health histories, to date a specific illness or ailment, they could guess to within two weeks only half of the time. 12 ‘The consistent finding’, across all of the research to date, ‘is that after about 2 weeks, individuals have difficulty accurately dating their past experiences, suggesting that date of occurrence information is typically not retained in memory’ 13 – and our trouble only increases as time passes. 14

Some studies suggest that unusual and memorable events may be dated more accurately than unremarkable ones. 15 Others, however, have found that memories for such events are more easily influenced by certain dating biases, such as a tendency to believe that the events happened more recently than they did, perhaps because we are able to remember more about them. 16 Still others have found no significant difference in our ability to date unusual as opposed to everyday events. 17 Regardless, even unusual

15 Betz 1997, above n. 8, 711.
16 Brown 1985, above n. 7.
personal events can be subject to ‘massive’ dating errors. In one study, for example, subjects had significant trouble dating correctly a number of intrusive medical procedures that they had undergone between two and six months previously, such as colon cancer tests and cervical smears. Many participants incorrectly reported that they had undergone these procedures within the last two months, meaning that their estimates were off by up to four months.

We seem to have even more trouble dating public events, even ‘recent and important ones’ like bombings or political assassinations, or highly sensational media events. In one study that asked participants to date important public events from the last five years, the subjects’ estimates were off on average by eleven months. In another, eight months after the O.J. Simpson verdict, people who had watched the trial and who reported having been at some degree emotionally invested in the outcome were asked to date it. The subjects’ responses ranged from underestimates of five months to overestimates of thirty-four months. Although the event had occurred eight months earlier, some thought that it had happened three months earlier, some three and a half years earlier.

This type of evidence clearly calls into question a finding that a claimant is not credible because, some twenty years later, he cannot remember the precise date of the Tiananmen Square self-immolations, or whether a particular personal relationship had begun at ‘the beginning of July, the middle of July, or the end of July’ several years previously. With ‘deliberate, repeated attention’ we can, of course, commit certain dates to

19 Ibid. One team of researchers commenting upon this study suggests that these errors are likely caused by ‘the overestimation of the frequency of events occurring during a given time period’, as discussed in the next section, rather than by ‘errors in the estimated date of the occurrence for specific events’: Thompson 1988, above n. 14, 461. Regardless, the result is the same: the subjects’ date estimates were significantly inaccurate.
20 Brown 1985, above n. 7, 139.
21 Ibid., 150.
22 S. Bluck, L. J. Levine & T. M. Laulhere, ‘Autobiographical remembering and hypermnnesia: A comparison of older and younger adults’ (1999) 14 Psychology and Aging 671-82. One study that, in contrast, concluded that its subjects were ‘very accurate’ in dating past news events, counted responses as ‘correct’ if the subjects could date a news event that had occurred within the last nine months to within one month: W. J. Friedman & J. Huttenlocher, ‘Memory for the time of “60 Minutes” stories and news events’ (1997) 23 Journal of Experimental Psychology: Learning, Memory, and Cognition 560-9.
23 Qian v. Canada (Minister of Citizenship and Immigration) [2007] FCJ No. 1282. The cases cited throughout this article provide representative examples of the IRB’s reasoning about various aspects of memory. In some, the point at issue was solely determinative of the claim (as in Zavalat, below n. 27, at para. 63, where the Court noted that the Board’s decision was ‘an inverted pyramid. In the end, everything can be traced back to one discrepancy in dates’). More often, the point emphasized here was one of several factors that the Board relied on in rejecting the claim. Regardless of how these findings weighed in the final decision, in light of the evidence presented in this article they simply have no place in a refugee status determination.
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memory in the same way that we memorize our capital cities or our multiplication tables.\(^{25}\) Many of us make an effort to remember, for example, ‘the years in which we graduated from high school, married and our children were born’\(^{26}\). Given this, the question for a refugee claimant often becomes: is it plausible that a person has failed to commit to memory the date he or a family member was arrested?\(^{27}\) Or the date of her gang rape?\(^{28}\) Or the date a loved one was murdered?\(^{29}\)

The dates that a person will commit to memory are highly individual and can be surprising. Nine months after the third largest earthquake in Ohio’s history, a moderate one, but one that nonetheless caused injuries, property damage and evacuations,\(^{30}\) local residents were off by about two months on average when asked to date it.\(^{31}\) Researchers comparing the memories of concentration camp survivors with the camp’s records found that not only had some of the survivors failed to commit to memory the date of their imprisonment but, in guessing, several were off by six months, which, as the researchers noted, placed this event in a different season: ‘one witness declared: “It was not quite winter, but late fall; so it must have been November or December”. In reality he had arrived in July’\(^{32}\). Another study interviewed thirteen witnesses to a murder four to five months after the event. These men and women had watched a man get shot to death in front of them, but ten out of the thirteen could not get the month right.\(^{33}\)

The fact that we do not reliably commit even traumatic dates to memory has long been a ‘major methodological problem in survey research’ and a

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\(^{25}\) Friedman 1993, above n. 5, 54.

\(^{26}\) Friedman 2004, above n.14, 597.

\(^{27}\) Etemadifard v. Canada (Minister of Citizenship and Immigration) [1995] FCJ No. 666; Ojo v. Canada (Minister of Citizenship and Immigration) [1997] FCJ No. 1006; Samseen v. Canada (Minister of Citizenship and Immigration) [2006] FCJ No. 727; Zavalat v. Canada (Minister of Citizenship and Immigration) [2009] FCJ No. 1639.

\(^{28}\) Akter v. Canada (Minister of Citizenship and Immigration) [2006] FCJ No. 1517.

\(^{29}\) Kadder v. Canada (Minister of Citizenship and Immigration) [2005] FCJ No. 1047; Angandeh v. Canada (Minister of Citizenship and Immigration) [2002] FCJ No. 1345.


\(^{31}\) W. A. Wagenaar & J. Groeneweg, ‘The memory of concentration camp survivors’ (1990) 4 Applied Cognitive Psychology 77-87 at 81. This was admittedly a distant memory for these subjects, but a life-altering one, and the researchers noted that for other types of details their memories were often ‘remarkably accurate’, 84.

primary concern of survey methodologists. Researchers who want to learn, for example, whether over the last six months the rate of unreported crime has gone up or down need to be confident that the people they are surveying are remembering accurately when the events they are describing occurred. A quarter of a century ago such researchers realized that we often do not reliably memorize the dates of serious assaults we have suffered. When they compared their subjects’ accounts of reported crime with the police records, they found that 20 per cent of the reported dates were wrong. One study asked its subjects, ‘During the last 6 months, did anyone beat you up, attack you, or hit you with something such as a rock or bottle?’ Of those who reported such an assault, 28 per cent got the date wrong. The researchers soon figured out that they could obtain a more accurate response by defining their time boundaries with memorable events rather than with dates. The classic 1983 study that made this point was entitled: ‘Since the eruption of Mt. St. Helens, has anyone beaten you up?’

Researchers know that it takes a memorable event, such as a volcano erupting, to help us remember when we were assaulted. Yet Members of the IRB routinely find it implausible that claimants have not memorized the precise dates of their assaults, or, for that matter, the date that their mother’s business was shut down, the anniversary of their church parish, or even their siblings’ birthdays. In one unusual case, the claimant could not remember the date of birth of her only child. She could not remember his age, approximately how old he was, or how many years into her marriage he was born – not that the latter would have helped, because she gave inconsistent testimony as to the date of her marriage. As the Federal Court of Canada noted, ‘it appears that the only date that she truly remembers is her date of birth’. From this, the IRB concluded: ‘we do not believe in the existence of her son’. The IRB concluded that this claimant, having invented a son, lacked the wherewithal to invent a birthday for him. The research on temporal memory suggests a more plausible explanation. For this claimant, from a rural background and with little formal

34 Thompson 1988, above n. 14, 461.
37 Ibid.
38 See, e.g.: Baker v. Canada (Minister of Citizenship and Immigration) [2002] FCJ No. 1200; Adegbola v. Canada (Minister of Citizenship and Immigration) [2007] FCJ No. 693.
39 Osmene v. Canada (Minister of Citizenship and Immigration) [2003] FCJ No. 405.
40 Kidimbu v. Canada (Minister of Citizenship and Immigration) [1995] FCJ No. 50.
41 Udeagbala v. Canada (Minister of Citizenship and Immigration) [2003] FCJ No. 1906.
42 Kaur v. Canada (Minister of Citizenship and Immigration) [2005] FCJ No. 2112 at para. 11.
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education, this type of temporal information may have had little value. For most of our history as a species, our lives were tied to cycles, to naturally recurring patterns, such as growing seasons and migratory and fertility cycles. Linear time is a relatively new addition to our collective consciousness and ‘mapping psychological time onto clock and calendar time’ is a ‘very recent’ phenomenon.\(^{43}\) Even today, in cultures where ‘clock and calendar time’ are hugely emphasized, including specific dates in everyday conversation ‘would seem irrelevantly detailed to any listener’.\(^{44}\) As Friedman, a leading authority on temporal memory, has concluded, ‘The absolute distance of an event in the linear past is nearly always useless information’.\(^{45}\) Except in a refugee claim, where it can be a matter of life and death.

2.1.2 Frequency

‘How often did you go to the movies last year?’ ‘How many times a month do you eat at a restaurant?’ How would you go about answering these questions? How accurate would your answer be?

To answer questions like these you would be unlikely to ‘simply retrieve relevant incidents and count them’.\(^{46}\) Instead of using a ‘recall-and-count’ procedure, we arrive at our estimates by making educated guesses, using a combination of strategies that depend on the ‘complex interplay’ of a number of variables.\(^{47}\) Tversky and Kahneman famously posited that we may base our estimates of the frequency of recurring events in part on the ease with which we bring these events to mind, a theory called the ‘availability heuristic’:\(^{48}\) when we can remember a type of event clearly, we may infer that it must have occurred frequently. Others have theorized that our estimates may be affected by how often we call the events in question to mind, that we may tend ‘to confuse occasions when an event occurred and occasions when the event was thought about’.\(^{49}\)


\(^{45}\) Friedman 1993, above n. 5, 60.


However we go about estimating frequency, we are simply not very good at it. Our estimates are ‘known to be inaccurate’ at best, and their accuracy declines with time. From the point of view of survey methodologists, who depend on this kind of information to learn about our lives, the accuracy of our frequency estimates is ‘distressingly low’. When subjects try to estimate how often they used bank machines or wrote cheques in the past week, or how often they got B’s in university, or how often in the recent past they bought specific types of groceries, their estimates are typically off by about 50 per cent. Even for fairly serious personal matters, our frequency recall is poor. In one study, when subjects kept diaries of their health for three months, and tried afterwards to recall how often they had been ill, they could do so with about 65 per cent accuracy. As the researchers note, since these subjects had been recording this information at the time, and since many suspected that they would be tested at the study’s conclusion, it is likely that under natural circumstances their memory ‘would be even poorer’.

Yet Members of the IRB find it implausible that, after many years of ‘repeated death threats’, the claimant ‘had difficulty saying how many times he had been threatened’; or that the claimant could not say how many times, on one occasion, police officers had insulted her using vulgar language: ‘she was evasive stating that she could not remember’ (later she added ‘that’s the way police spoke’); or the Member concludes that a claimant is being ‘vague, evasive and hesitant’ because he cannot specify under oath the number of political party meetings that he attended, dismissing his explanation: ‘I attended several of them. I cannot remember the number’. The warning given by memory researchers to survey methodologists applies equally well to refugee status decision makers:

Survey researchers are often after the kind of quantitative, autobiographical information that taxes even the most cooperative respondents’ mental abilities. Recall is not dependable. Inference, which helps fill in the details that respondents cannot recall, is at best inexact and at worst misleading.

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53 Cohen 1995, above n. 6, 281.
54 Ibid., 284.
55 Morales v. Canada (Minister of Citizenship and Immigration) [2006] FCJ No. 609 at paras. 2, 4.
56 Joseph v. Canada (Minister of Citizenship and Immigration) [2000] FCJ No. 49 at para. 18.
57 Garande v. Canada (Minister of Citizenship and Immigration) [2006] FCJ No. 1735 at paras. 49-50.
58 Bradburn 1987, above n. 46, 161.
2.1.3 Duration

The principal conclusion to be drawn from the ‘vast literature on the estimation of duration’ is that these types of memory reconstructions are ‘often inaccurate’.

Early studies showed, for example, that their subjects displayed a ‘consistent tendency’ to overestimate the length of hospital stays; that mothers tended to underestimate the duration of their labour, but tended to overestimate how long they had breastfed their children; that some crime witnesses dramatically overestimated the time that it had taken police to respond to a distress call. In a laboratory setting, when subjects who had watched a staged event were asked to guess how long it had lasted, their responses were off by a minimum of a factor of two. When people kept diaries of their health for three months and then tried to recall the duration of their illnesses and ailments, their accuracy rate was 53 per cent.

From this pattern of errors, psychologists propose that our reconstructions of event duration are based on ‘how long events typically last’, ‘whether the event-type always has the same duration’, and ‘a host of other aspects’, such as ‘the complexity and interest value of the material that filled the duration’. Several researchers have observed, for example, that ‘people often use the number of events that they remember as a crude measure for the amount of time elapsed’: the more discrete components to an event, the longer it will seem. Since we ‘appear to store knowledge about typical event duration in memory, rather than duration information for specific past events’, the duration of novel or atypical events is particularly hard to estimate, and our estimations are surprisingly suggestible: the way that a

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66 Cohen 1995, above n. 6, 282.
68 Wright 2008, above n. 43, 98.
69 Burt, Time 2008, above n. 5, 137 (emphasis added).
question is phrased can significantly alter our answer.\textsuperscript{70} As one text concludes, ‘In summary, estimating how long something took to happen is a very difficult task’.\textsuperscript{71}

Decision makers cannot expect claimants to remember the duration of events, and should be cautious about expecting them to provide accurate duration estimates. The Federal Court of Canada was certainly right to overturn a decision in which the IRB found, for example, that a claimant was not credible because he could not remember how long it had taken him to dig his own grave at gunpoint. The Court suggested that the Member should have paid more attention to the claimant’s explanation: ‘he did not have a watch but more importantly he explained, in the particular situation he was in, his mind had not focused on the point’.\textsuperscript{72}

\subsection*{2.1.4 Sequence}

Some of the early research into our memory for dates had suggested that while such memory is clearly unreliable, we nonetheless seem to have a ‘fairly good idea of the relative ordering’ of events.\textsuperscript{73} Yet a number of more recent studies that have specifically explored this issue call this conclusion into question. In one, for example, entries from the participants’ diaries were transcribed onto cards and shuffled. When the subjects were asked to put them back into chronological order, they could do so correctly for an average of 36.5 per cent of the entries, regardless of how well they recalled the individual memories.\textsuperscript{74} In another, subjects were given a camera and asked to document a day’s events. At the end of the day, when they were asked to order the photographs chronologically, they got just over half of the sequence right (52.6 per cent). Two months later, their accuracy rate dropped to 36.2 per cent.\textsuperscript{75}

From studies like these, researchers now conclude that in fact we ‘often have difficulty recalling the order of the components of the autobiographical events’,\textsuperscript{76} that we are ‘not very good’\textsuperscript{77} at this type of task, that our attempts

\textsuperscript{70} After witnessing a staged incident in a university lecture, e.g., students were asked ‘“How long did it take the person to [ ] through the lecture theatre”, with either “walk”, “run” or “pass” being used to complete the question’. The students’ estimates paralleled the action speed implied by the question verb; the “walk” condition produced the largest duration estimates and the “run” condition the smallest: Burt 1996, above n. 65, 56; see also, Prohaksa 1996, above n. 67; Burt 1992, above n. 60.

\textsuperscript{71} Wright 2008, above n. 43, 99.

\textsuperscript{72} Alfonso v. Canada (Minister of Citizenship and Immigration) [2007] FCJ No. 72 at para. 38.

\textsuperscript{73} Brown 1985, above n. 7, 150; see also, Bruce 1989, above n. 47, 153.


\textsuperscript{75} C. D. B. Burt, S. Kemp & M. Conway, ‘Ordering the components of autobiographical events’ (2008) 127 Acta Psychologica 36-45 (Burt, Ordering). Other studies suggest that our ability to order events will likely be even worse when these events are unrelated; Friedman 2004, above n.14, 595, 597.

\textsuperscript{76} Burt, Ordering 2008, ibid., 43.

\textsuperscript{77} Burt, Time 2008, above n. 5, 130.
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‘may be characterized by chronological misplacements’,78 and that there is ‘ample evidence’ that this type of memory ‘rapidly declines’.79 As the researchers note, these error patterns are ‘consistent with the prevalence of errors found when peoples’ ability to date events is examined’80 and is simply more evidence for the general finding, from study upon study, that ‘“memory for what” seemed to be largely independent of “memory for when”’.81

2.2 Common objects

To test the claimant’s assertion that she was a citizen of Somalia, the Tribunal Officer asked her a simple question: ‘What’s on the back of the Somali five shilling note?’ Her counsel intervened. ‘Before my client answers’, she said, ‘Can you tell me, Officer, what’s on the back of the Canadian five dollar bill?’ He could not.

The Officer’s question was less simple than it seemed because of our unexpectedly poor memory for common objects. The canonical study of common object memory, from 1979, demonstrated that its American subjects had only a very rough idea of what an American penny looked like. This study asked its subjects to draw a penny from scratch; to draw one when given a list of its features; to choose from among a list of genuine and fake features; to identify inaccuracies in pictures of pennies; and to pick a genuine penny out of a line-up. The results were what the researchers gently called ‘remarkably poor’;82 attempts to draw a penny were for the most part ‘grossly inaccurate’; less than half of the participants could identify the genuine penny; and many of the participants fell for a number of the fake features.83 In case these results were peculiar to the penny, this study was replicated using different coins, with similar results.84 And in case these results were peculiar to Americans, it was repeated world-wide: Canadians, Portuguese, Irish, Japanese, British – none of us has any clear idea what our coins look like.85

As other studies have shown, when it comes to everyday objects, we have trouble remembering everything from the location of the digits on the keypads of calculators86 to the shape of the crescent moon.87 In one study

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78 Burt 2000, above n. 74, 330.
79 Burt, Ordering 2008, above n. 75, 43.
80 Ibid.
83 Ibid., 301 (although no one was fooled by ‘Made in Taiwan’).
from the days before text-messaging, not one of the 151 participants could correctly remember how the letters were laid out on a telephone dial. In another set of experiments, subjects could remember on average only 47 per cent of the main features, such as shape and colour, of ‘some of the most important and common’ British road signs, even though, as the researchers pointed out, when compared with coins, road signs are ‘much larger, their designs are conveyed by different colours rather than merely by different contours, and attending to them is vital for personal safety’. Almost half of the participants believed that the octagonal Stop sign was circular. For such common objects, ‘repeated exposure . . . proved to be remarkably ineffective in ensuring that their appearance can be accurately recalled’.

From such studies a consensus has emerged that we have a particularly poor visual memory for common objects, and that this is due to an encoding rather than a retrieval failure – it is not that we store this information somewhere in our memory and find it difficult to locate it, but rather that we fail to register this type of information at all, for ‘passive exposure . . . does not in itself lead to retention in memory’. We could, of course, make the effort to learn what our money looks like, as demonstrated in a study entitled: ‘Memory for common objects: Brief intentional study is sufficient to overcome poor recall of US coin features’, but we almost never do, because such knowledge ‘would serve no useful function’; we ‘do not need to know what is inscribed on coins to use them properly’. Our memories for common objects ‘are only as precise and accurate as they need to be’ and we ‘only remember enough of the visual properties of objects to be able to make the quite gross discriminations required in everyday life’.

In a refugee hearing, however, claimants may be disbelieved if they perform poorly on this type of memory test. A claimant who cannot accurately describe his national identity document, for example, may simply be demonstrating this well-known memory phenomenon.

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90 Ibid., 198.
91 Ibid., 195.
92 Martin 1997, above n. 87, 280.
94 Martin 1997, above n. 87, 280; see also, Marmie 2004, ibid., 446.
95 Rubin 1983, above n. 84, 340.
2.3 Repeated events

When we experience repeated similar events, afterwards we may not only have trouble estimating their frequency; as a large body of research has shown conclusively, we typically lose the ability to remember individual instances clearly, if at all. Such ‘initially distinguishable events can become confused or irretrievable’ because, simply put, it is often difficult ‘to keep track of any one particular repeated event’.

This is partly the result of what researchers refer to as the “updating” problem: in order to remember where you parked your car today, you need to update your memory of where you parked your car yesterday. As a result, ‘When you are asked where you parked your car 2 weeks ago, any exact answer you give is likely to be wrong. Updating effectively erases the unique details of the past event from memory’. In addition, rather than remembering each individual cold that we have suffered, or each visit to the doctor, our memories for these similar events typically merge and are replaced by ‘generic memories for classes of similar events’, such as a typical cold or visit to the doctor. Once our minds have enough information to create this new ‘blended memory’, the specific details of individual past instances are no longer needed; what we retain instead is their gist. Given ‘the enormous problems . . . that would be incurred if everything were remembered’, this shift from specific event memory to generic script memory seems a good way to maximize retrieval efficiency.

98 Bradburn 1987, above n. 46, 158.
99 Haber 2000, above n. 2, 1070.
100 Ibid., 1071.
103 Williams 2008, above n. 33, 23.
105 Ulric Neisser, a pioneering researcher on autobiographical memory, coined the term ‘repisodic memory’ to refer to these constructed memories for repeated events. In a famous case study, Neisser analyzed the testimony of John Dean, former counsel to Richard Nixon, who had appeared before the Senate Watergate Investigating Committee and ‘testified about conversations that later turned out to have been tape recorded’. Although Dean’s description of individual conversations contained ‘systematic distortion’, Neisser nonetheless concluded that it was fundamentally accurate: it ‘was accurate at a level that is neither “semantic” (since he was ostensibly describing particular episodes) nor “episodic” (since his accounts of the episodes were often wrong). The term “repisodic” is coined here to describe such memories: what seems to be a remembered episode actually represents a repeated serious of events, and thus reflects a genuinely existing state of affairs’. As Neisser noted in conclusion, Dean had ‘recalled the theme of a whole series of conversations, and expressed it in different events’. U. Neisser, ‘John Dean’s memory: A case study’ (1981) 9 Cognition 1-22 at 1; see also, Barclay 1986, above n. 14, 102. For a methodological criticism of Neisser’s John Dean study, however, see, D. Edwards & J. Potter, ‘The Chancellor’s memory: Rhetoric and truth in discursive remembering’ (1992) 6 Applied Cognitive Psychology 187-215.
Everyday examples of this fairly intuitive observation abound.\textsuperscript{106} Decision makers sometimes seem to believe, however, that if a repeated event is important or upsetting enough, it should be immune to this kind of shift, that each individual instance will be burned into our brains. What they often fail to understand is that the shift from specific event to generic script memory happens for significant and distressing events as well as for mundane ones.

If important repeated events were immune to this type of shift, we might be better at recalling our own medical history. In fact we are notoriously bad at it, in part because of the repetition effects described above. One study asked its subjects to recall any recurring serious medical events from the past year, where ‘recurring’ events were defined as those that had required three or more visits to medical professionals and ‘serious’ events were those ‘involving a problem that would have a high probability of resulting in a major infection, debility, or death if not treated by a medical professional’.\textsuperscript{107} The subjects failed to recall more than half (54 per cent) of such visits.\textsuperscript{108} Similarly, if distressing memories were immune to this type of shift, social workers and survey methodologists could stop trying to develop new ways to improve the specific event recall of domestic abuse victims. Researchers have long recognized that their subjects’ inability to recall particular instances of abuse ‘may compromise the validity’ of their accounts of their life experiences, and so they have explored various surveying methods to try to help these women to ‘gain better access’ to these kinds of memories.\textsuperscript{109} And as discussed further below, a recent study of refugees found that ‘a common difficulty’ reported by its subjects was ‘related to the experience of repeated events that are similar’, and suggested that some of their documented memory problems may have been caused by ‘the mixing up of two or more events’.\textsuperscript{110}

One of the clearest examples of the shift from specific event to generic script memory for repeated distressing events was documented in a study of four young people who had been sexually exploited over several months

\textsuperscript{106} For a review, see, Jobe 1993, above n. 101.
by a prostitution and pornography ring. When their abusers were eventually arrested, these children (ages eight to fifteen years) were interviewed at length by the police. They gave comprehensive statements in which they described in detail the abuse that they had suffered, statements whose overall truthfulness and accuracy were corroborated by the several hundred audiotapes and photographs seized by the police. And yet, when they were asked specifically about the particular events captured in the forensic evidence, they often had no clear memory. For many of these incidents, the children either admitted that they could not recall them or else they maintained that they had never happened, despite conclusive evidence to the contrary. Overall, their testimony contained ‘high levels of omission errors’ – they had no memory at all for more than a third (39 per cent) of the serious acts of abuse ‘which are known to have occurred’.111 The researchers concluded that the children’s memories for these repeated events had simply fused.112

In short, there is no reason why decision makers should not expect to see evidence of the standard ‘transition from episodic to semantic memory’113 for claimants’ memories of important or distressing events.

2.4 Peripheral information

The fact that an event is memorable does not mean that we will remember its every detail. When the IRB finds, for example, that a claimant ought to remember ‘how the people at the military prosecutor’s office had been dressed’ on an occasion several years earlier,114 or the precise shape, size and colour of the bag in which she had packed her belongings,115 or the frequency of the radio station that he had been listening to when he learned that he was being sought by the authorities,116 this simply does not accord with what we know about how people remember.

As ample research has made clear, ‘It is not justified to assume that all details are well retained because they occurred within an emotional scenario’.117 Instead, we will remember best those aspects of an event to which we were paying the closest attention at the time, and we will be unlikely to remember clearly, if at all, others that escaped our focus. ‘It is possible for events to occur directly in front of you’, for example, ‘well within your

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112 Ibid.
116 Michael v. Canada (Minister of Citizenship and Immigration) [1997] FCJ No. 933.
117 Christianson 1993, above n. 33, 367 (emphasis in original).
range of seeing and hearing, and yet make no impact on your memory if you were attending to something else at the time'.

More surprising, perhaps, is the observation that the very act of focusing on certain aspects of an event ‘comes at a cost’; it appears to impair our ability to remember other information to which we were not paying as close attention. Researchers have suggested that ‘attentional narrowing’ or ‘tunnel memory’ may help to explain the findings from a number of eyewitness studies in which witnesses to actual or simulated crimes, who had focused intently on the central features of the event unfolding in front of them, had significantly impaired memory for other surrounding details. These studies ‘tend to converge to a similar pattern of data: witnesses’ descriptions seem to be accurate and persistent over time with respect to certain central, critical details of emotional or violent events, but are less accurate for peripheral, irrelevant details, or surrounding/circumstantial information’.

Which information is ‘central’ and which is ‘peripheral’ is necessarily a subjective determination, one to be made from the perspective of the person whose memory is at issue: ‘central details’ are those ‘to which the subject attributes the most importance’. One striking fact to emerge from the research into eyewitness memory is that there is considerable individual variety in the types of information that captures our attention. When different people watch the same crime scene, some remember the make of the car and not the colour, some the colour and not the make. One witness to a shooting told the police that she had been riveted by the victim’s body. She could describe precisely and accurately his wounds, his location on the street and the physical position of his body, but when she was asked to describe what he was wearing, she remembered him in a T-shirt and red and black plaid jacket. He was wearing a dark blue sweater.

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118 Haber 2000, above n. 2, 1061.
120 Christianson 1991, ibid., 693.
122 See, e.g., Christianson 1993, above n. 33; Christianson 1987, above n. 119.
124 Herlihy 2002, above n. 110, 325.
125 Kramer 1990, above n. 121, 168.
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and a blue jean jacket. Despite being literally wrapped around the focus of her attention, the victim’s clothes were peripheral information (‘this witness reported that the body was her “main focus of attention” but apparently this did not include his clothing’).  

One thing that will typically capture our attention, however, is a weapon, and this has a predictable effect on our peripheral memory: in study upon study, subjects exposed to a weapon would focus on it at the expense of everything else around it, including the person holding it. The first study to document this ‘weapon effect’ or ‘weapon focus’ showed two groups of people short videos of a convenience store transaction, identical except that in the first video the customer hands the clerk a cheque and the clerk gives him back his change, whereas in the second, the clerk pulls a gun, and the clerk hands him the money from the till. The subjects who saw the gun version were less than half as likely to be able to pick the customer out of a line-up. This effect has been replicated in a number of other laboratory studies, as well as in live-simulation experiments.

Weapons focus may work both forwards and backwards; not only do we stop registering other aspects of a scene once a weapon comes into view, we may also have trouble remembering information that was presented before the weapon made its appearance. Such ‘retrograde impairments’ were demonstrated in a modified version of the video study above, where two groups of subjects viewed identical videos, except that one of the

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127 Yuille 1986, above n. 33, 296.
129 A. Maass & G. Köhnken, ‘Eyewitness identification: Simulating the “weapon effect”’ (1989) 13 Law & Human Behavior 397-408; Kramer 1990, above n. 121; W. Oue, N. Onuma, Y. Uchino & Y. Hakoda, ‘The effect of sharpness of a knife on weapon focus’ (2002) 21 Japanese Journal of Psychonomic Science 45-6; for review, see, Haber 2000, above n. 2. The fact that our attention is focused on a weapon, however, does not mean that we will necessarily be able to remember that weapon clearly. Focused attention is a necessary but not sufficient condition for detail memory. While some ‘weapon focus’ studies have noted that their subjects were generally able to describe the weapon well (Kramer 1990, above n.121), a number of other studies have found that we are often quite poor at recognizing and identifying different types of guns, even in focused laboratory experiments (for a review, see, M. J. Sharps, A. B. Hess, H. Casner, B. Ranes & J. Jones, ‘Eyewitness memory in context: Toward a systematic understanding of eyewitness evidence’ (Fall 2007) The Forensic Examiner 20-7 at 22). The fact that ninety-two of 103 respondents in another study thought that they had seen a gun in the hands of a man holding an electric screwdriver highlights a separate and related problem: ‘an impressive body of psychological research’ on eyewitness memory, ‘consisting of more than 2000 papers [as of 2005]’, has demonstrated beyond question that ‘gross inaccuracies are not uncommon and that memory is highly suggestible’. P.A. Granhag, L. A. Stromwall & M. Hartwig, ‘Eyewitness testimony: Tracing the beliefs of Swedish legal professionals’ (2005) 23 Behavioral Sciences and the Law 709-27 (Granhag, Eyewitness) at 709; Sharps 2007, above, 25; Williams 2008, above n. 33, 76; see also, D. B. Wright & E. F. Loftus, ‘How misinformation alters memories’ (1998) 71 Journal of Experimental Child Psychology 155-64.
videos ended without incident and the other ended in a shooting. The group that saw the violent version had trouble remembering peripheral details from the first half of the film, before the shooting had occurred. The differences in recall were ‘dramatic’: only 4.3 per cent of the subjects who had watched the violent version correctly remembered a particular detail from the first half of the film, compared with 27.9 per cent of the non-violent control group. ‘A promising explanation for these memory deficits’, the researchers concluded, ‘is that mental shock disrupts the lingering processing necessary for full storage of information in memory’.131

Some psychologists have suggested that when a weapon is present ‘almost everything else that’s happening goes unnoticed and therefore unremembered’ and that ‘it should always be assumed that violence in any form narrows attention, and that which is outside the resultant narrowed attention is encoded less completely, if at all’.132 This may be going too far, however, as other studies have failed to find this effect,133 which suggests that it may not occur under all circumstances, or that it may occur but be outweighed by other effects. There nonetheless remains a ‘broad consensus’ that weapon focus generally impairs eyewitness memory for peripheral details134 and that ‘high degrees of stress [at the time of an event] tend to reduce the amount of recall’.135

In light of the above, decision makers must be extremely cautious in concluding that any particular aspect of an event, especially a violent one, is by its nature so significant that a claimant could hardly fail to remember it.

2.5 Names

Many studies have shown experimentally what most of us know instinctively: that proper names are often very hard to remember. In clinical

131 Loftus 1982, above n. 130, 321. These findings have not been consistently replicated, however: other studies that have exposed their subjects to shocking images among a sequence of neutral ones have found anti-retrograde but not retrograde impairments: see, T. H. Kramer, R. Buckhout, P. Fox, E. Widman & B. Tusch, ‘Effects of stress on recall’ (1991) 5 Applied Cognitive Psychology 483-88; S.-A. Christianson & L.-G. Nilsson, ‘Functional amnesia as induced by a psychological trauma’ (1984) 12 Memory & Cognition 142-5.

132 Haber 2000, above n. 2, 1062.

133 When researchers have analyzed case reports of live crimes, e.g., or have interviewed assault victims, they have sometimes found that the witnesses’ descriptions of the perpetrator were more complete when a weapon was involved. It is difficult to generalize from these types of studies, however, because of their small sample sizes, and because they are typically unable to control for many key ‘confounding variables’: the researchers cannot tell from the case reports, e.g., how far away the various witnesses were, how good their visibility was, how long the crime lasted, or even whether or not the witnesses knew the offender beforehand. Cooper 2002, above n. 123, 189; G. F. Wagstaff, J. MacVeigh, R. Boston, L. Scott, J. Brunas-Wagstaff & J. Cole, ‘Can laboratory findings on eyewitness testimony be generalized to the real world? An archival analysis of the influence of violence, weapon presence, and age on eyewitness accuracy’ (2003) 137 The Journal of Psychology 17-28 at 25, 26.

134 Villegas 2005, above n. 126, 24; see also, Granhag, Eyewitness, 2005, above n. 129, 718.

settings it becomes clear, for example, that it is much harder for subjects to remember a person’s name than to remember his occupation or hobbies.¹³⁶ There is, in fact, a ‘vast difference between memory for names and memory for occupations’.¹³⁷ Many researchers have concluded that gaps in memory are ‘much more frequent for proper names than for other kinds of words’,¹³⁸ and that our brains may in fact use separate and independent memory processes to store proper names, distinct from the ones that we use to remember ‘other types of information that we know about people’.¹³⁹ Whatever the neural mechanisms at work, ‘you may often be able to remember many biographical details about the person, but still be unable to put a name to his or her face’.¹⁴⁰

Although we typically remember names more easily if we have used them frequently or recently,¹⁴¹ we nonetheless often forget the names of people who are ‘very familiar’, even those whom we have known for many years.¹⁴² One study looking at mental blocks found, in fact, that the majority of its subjects’ memory gaps were for the names of friends and acquaintances.¹⁴³ As a result, researchers suggest that ‘proper names are not just difficult to learn . . . but difficult to retrieve, even when well learned’.¹⁴⁴

One theory that has been proposed to explain this finding is that proper names are ‘difficult to remember because they have little, if any meaning’.¹⁴⁵ Words that carry meaning are connected in our brains with other pockets of related information, and are often triggered when we bring that related information to mind. Since proper names are meaningless, however, or else carry meanings (such as Hunter or Taylor) that we ‘habitually ignore’ because they are ‘irrelevant, nonsensical or conflict with actual person identity information’,¹⁴⁶ they are ‘lacking in the semantic associations that allow other kinds of person identity information to be related to stored knowledge’.¹⁴⁷

¹³⁸ G. Cohen, ‘Why is it difficult to put names to faces?’ (1990) 81 British Journal of Psychology 287-97 at 287; Burke 1991, above n. 136. Other researchers have raised cautions about the methodologies of these studies, however; see, Hanley 2008, ibid., 131.
¹³⁹ Hanley 2008, ibid., 126.
¹⁴⁶ Cohen, ibid., 295.
¹⁴⁷ Ibid., 296.
Without question there is ‘a wide range of individual differences in ability’ to remember names. Yet ‘many people are not at all good’ at it, and enough are so bad that it can be hard for medical professionals to tell, for example, whether a patient’s poor memory for names is simply the result of everyday bad memory, or whether it is a sign of a more serious memory impairment. In other words, when it comes to memory for names, enough of us are impaired enough that ‘the line between normal and pathological performance is blurred’.

Although we often forget the names even of our friends and acquaintances, and our ability to remember proper names in general is often so poor that it borders on a clinical impairment, the Board has disbelieved at least two claimants because they could not remember the name of the ship on which they fled their country. Another was disbelieved because he could not not the police officer from whom he had requested evidence, another because he could not recall the names of the other prisoners with whom he had been incarcerated years earlier. The research suggests that such findings are simply unreasonable.

### 2.6 Verbatim memory

‘When people remember conversations, what do they remember?’ Researchers distinguish ‘gist memory’ (‘memory for content’) from ‘verbatim memory’ (‘memory for [verbal] structure’). They posit that these two different types of memory are ‘represented and stored independently’ in the brain and are ‘dissociated from each other’, meaning that it is possible to remember the one without the other.

Many studies have shown that verbatim and gist memories have ‘differential survival rates’. After even a short passage of time, our ability to remember exact wording is often ‘surprisingly poor’ or ‘extremely poor’.
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poor’, even where the precise wording is important: verbatim memory ‘is very fragile and may be forgotten within a few minutes or even seconds’. In one laboratory study, verbatim memory disappeared ‘after only 40 syllables of intervening material (equal to 12.5 seconds)’. As a result, when we remember conversations, typically only gist memory, only ‘the semantic properties of discourse are encoded into long-term memory’. This is true even for novel or unexpected exchanges: the fact that a conversation is surprising will likely improve our ability to remember its gist, but will not help our verbatim recall, which remains as weak as ever.

The short answer to the question posed above is that when we remember conversations, we ‘tend to remember the gist, showing little verbatim memory of what was said’. Decision makers cannot expect claimants to be able to recall the precise wording of verbal exchanges.

3. Consistency

It is one thing for a claimant to say ‘I can’t remember’; it is quite another for her to tell a story that keeps changing. Even when decision makers can accept gaps in a claimant’s memory, most, nonetheless, expect a high degree of consistency in her testimony. Before appearing at her IRB hearing, the claimant must complete a questionnaire that asks her to provide, along with other biographical information, a written statement setting out ‘all of the significant events and reasons that led you to seek protection in Canada’; her credibility will then be assessed based on the consistency of her oral testimony with this written evidence. Refugee status decision makers are not alone in believing that a consistent story is

163 Pezdek, ibid.
164 Ibid., 308.
165 Campos 2006, above n. 154, 35; see also, Miller 1996, above n. 160. In addition, as Neisser’s John Dean study demonstrated, in remembering a series of conversations, we may remember the gist of the whole rather than the gist of any particular instance: ‘He is not remembering the ‘gist’ of a single episode by itself, but the common characteristics of a whole series of events’. Neisser 1981, above n. 105, at 20.
166 In the IRB’s training materials for new Refugee Protection Division Members, under the heading ‘Tools for Testing Presumption of Credible Testimony’, the first item listed is ‘Inconsistencies within the testimony’. IRB, ‘Reasons for Decision: RPD New Member Training: Training Materials’ Learning and Professional Development, June 2007, 13.
a true story, and the reverse. Police officers, prosecutors and judges, as well as lay people, tend overwhelmingly to agree.167

Yet when it comes to assessing credibility, police officers, prosecutors and judges, as well as lay people, have ‘hit rates just above the level of chance’.168 And one of the commonly proposed explanations for this low success rate is that professional lie detectors and lay people alike tend to rely on the ‘consistency heuristic’ – the notion that ‘consistency implies truth, whereas inconsistency implies deception’.169 In fact, it has now been clearly demonstrated in study upon study that truthful and deceptive accounts are ‘equally consistent over time’,170 most likely because ‘liars try to remember what they have said in previous interrogations, while truth-tellers try to remember what they have actually experienced’.171 Contrary to popular belief, these tasks are equally challenging.172

Two sets of findings help to explain why it is often so difficult for truthful people to recount the same event in a consistent fashion. First, as set out above, all memories are reconstructions, and certain kinds of information are not easily reconstructed. When we try to date events, or to describe their duration or frequency, we estimate. When we report conversations, rather than providing faithful ‘word-for-word reproductions’,173 we narrate


172 The noted exception is when people testify in pairs: pairs of liars tend to be more consistent between them, not less, suggesting that ‘liars in collusion know that planning is crucial’. Granhag 2003, above n. 170, 850; W. A. Wagenaar & A. Dalderop, ‘Remembering the zoo: A comparison of true and false stories told by pairs of witnesses’ (1994), unpublished manuscript, Department of Experimental Psychology, Leiden University, The Netherlands, in Granhag 2003, above n. 170; Strömwall 2003, above n. 167.

them in our own words. If we are then asked to date or retell the same experience again, weeks or months or years later, we will estimate or illustrate anew, and we may come up with a different figure or use different words – a fact that routinely causes claimants to be judged not credible. To the claimant who received three threatening phone calls (or was it four?); or who was arrested at the end of June (or was it early July?); or whose attackers in conversation stated a fact outright (or did they clearly imply it?); Members of the Board respond with the classic ‘Were you lying then, or are you lying now?’ This is a typical and misleadingly ‘mechanical’ application of the consistency heuristic, one that likely helps to explain why in one study ‘lie-catchers given access to consecutive statements from one suspect did not perform better than lie-catchers given access to one statement only’.

Second, as set out below, over time a person’s memory, and hence her story, may change and may change significantly, owing to a number of well-documented memory effects. Some memories fade or become distorted while others get stronger. Loss and gain of information is ‘typical of how memory works’. As a result, ‘truth tellers, who repeatedly try to retrieve a previously experienced event, can be expected to gain, lose, and change information over time’. This has led Loftus, perhaps ‘the main authority in eyewitness memory research’, to suggest in all

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174 A leading researcher recently noted in a study entitled ‘Retelling is not the same as recalling’ that when we recount our experiences in a conversational style we ‘retell’ them, rather than attempting to recall them as precisely as we would in a more structured memory test. Outside of the laboratory, we ‘tend to focus on the kernel of meaning rather than on specific details’ and for this reason, across a wide variety of everyday contexts, truthful and broadly accurate retellings are likely to be significantly inaccurate from a clinical perspective. E. J. Marsh, ‘Retelling is not the same as recalling: Implications for memory’ (2007) 16 Current Directions in Psychological Science 16-20 at 16, 17.


176 Ojo, above n. 27.

177 Taboada v. Canada (Minister of Citizenship and Immigration) [2008] FCJ No. 1395.

178 Strömwall 2003, above n. 167, 121.

179 Granhag 1999, above n. 169, 163. A further caution against relying on consistency as a measure of credibility is noted in the research: to a large degree, consistency is in the eye of the beholder. Several studies looking at consistency have observed that there was often ‘substantial disagreement’ among the researchers and their assistants as to whether or not the subjects’ statements were consistent. For one set of statements, e.g., half of the seventy-eight assistants found them to be consistent and half found them to be inconsistent. Granhag 2000, above n. 168, 211, 215; see also, S. Porter, J. C. Yuille & D. R. Lehman, ‘The nature of real, implanted and fabricated memories for emotional childhood events: Implications for the recovered memory debate’ (1999) 23 Law & Human Behavior 517-37 in Granhag 1999, above n. 169. This level of subjectivity further undermines the value of consistency as a reliable tool for assessing credibility.


seriousness that the oath in court should be changed to: ‘Do you swear to tell the truth, the whole truth, or whatever it is that you think you remember?’

The following section will address these effects for memory in general, and will then turn specifically to the types of shocking and upsetting memories that claimants are often describing, for it is a common misperception ‘that highly stressful and emotional experiences leave indelible memories’. In fact, as discussed below, the standard testing conditions at refugee status determinations help to ensure that claimants’ memories are particularly vulnerable to these kinds of shifts.

3.1 Losses

Not surprisingly, memory research confirms that we can expect to experience a more or less ‘linear loss’ of our autobiographical memory. Over time, our memories usually ‘lose specificity’ and ‘become more generalized’, our ‘older memories tend to be less vivid and less accessible’, and although our confidence in our memories often remains misguidedly high, in fact their ‘accuracy declines’. The more time passes, the more of our past we forget, even the ‘critical details’. In one famous study, a researcher kept detailed records of his daily life, making a special note of the ‘critical’ facts that he felt he would ‘certainly’ remember. When he tested his memory one year later, he had no memory at all for 20 per cent of them; after five years, the figure had climbed to 60 per cent.

One factor that has been shown to increase the rate at which we lose information is the mental rehearsal of other related information. As set out in the next section, the more often we call a memory to mind, and the more we try to remember about it, the more of its detail will come back to us. As a rule, ‘rehearsed information is better remembered than non-rehearsed information’. However, as with focused attention, focused memory comes at a cost: we are more likely to forget other aspects of the remembered event upon which we have not been concentrating. Various cognitive theories have been proposed to account for this effect, known as

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184 Williams 2008, above n. 33, 78.
185 Belli 2001, above n. 109, 46.
187 Bradburn 1987, above n. 46, 158.
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‘retrieval competition’ or ‘retrieval-induced forgetting’. Whatever the cause, this involuntary process appears to be ‘a very robust and general phenomenon’, one that has been demonstrated not only in the laboratory in a variety of word experiments, but also in studies of eyewitness and autobiographical memory.

In one famous eyewitness experiment, subjects were shown slides of a crime scene, and afterwards half were asked to try hard to remember certain elements. When all of the subjects were then asked to recall as much as they possibly could about what they had witnessed, those who had been coached were much better able to remember the specific aspects to which their memories had been directed, but they could remember much less about the scene in general. The same effects have predominantly, although not always, been replicated in other eyewitness studies. Similar findings have also been reported in the context of autobiographical memories, leading some researchers to conclude that ‘retrieving some autobiographical memories may unintentionally, and almost inevitably, inhibit other [related] memories’. When subjects are asked, for example, to recall sets of thematically related memories, and are then made to practice

191 Bäuml 2005, ibid., 1221.
196 Barnier 2004, ibid., 469.
only some of these memories, their recall for the unpracticed memories becomes significantly impaired.\textsuperscript{197}

The forensic implications of these studies are not lost on the researchers. They note that the methods used by police and lawyers in questioning witnesses ‘give rise to exactly those conditions which, in the laboratory, have been shown to produce robust retrieval-induced forgetting effects’.\textsuperscript{198} Some speculate, in fact, that ‘the frequency and intensity of police interrogations’ may in fact cause effects that are ‘larger than in an experimental laboratory’.\textsuperscript{199} At the very least, since it has been shown under laboratory conditions that ‘repeated interrogation of a witness can modify the witness’s memory – enhancing the recall of certain details while inducing the forgetting of other details’,\textsuperscript{200} it would ‘seem somewhat ironic, therefore, that the very procedure used for eliciting a witness’ account of an event may actually give rise to those conditions that are most likely to promote memory distortions’.\textsuperscript{201}

Decision makers will often assess a claimant’s credibility in light of his ability to provide spontaneous detail. A well-trained Member will go beyond the four corners of a claimant’s initial written statement to see if he can expand on his story. The claimant, however, is caught in a bind. If he has counsel – or any clue about how the refugee claim process works – he will have spent many hours rehearsing his statement, in order to minimize the natural inconsistencies that would arise in an impromptu retelling and that Members of the Board may misinterpret as lies. However, doing so may actually make it harder for him to recall the types of details that the Board relies upon as indicators of credibility.\textsuperscript{202}

\textsuperscript{197} Ibid.; see also, Mcleod 2005, above n. 194. Some researchers have suggested a link between these findings and other research that has shown a correlation between ‘intrusive memory’ (flashbacks) and ‘over-general memory’ (memory that is vague and lacking in detail). People who remember trauma vividly and repeatedly often have poor memories generally, and some researchers suggest that this effect could be caused by an ‘RIF [Retrieval-Induced Forgetting] -like phenomenon’: when our minds are caught in the loop of involuntarily rehearsing traumatic memories, our recall for other memories may become impaired. Wessel 2006, above n. 195, 432; A. R. Moradi, J. Herlihy, G. Yasseri, M. Shahraray, S. Turner & T. Dalgleish, ‘Specificity of episodic and semantic aspects of autobiographical memory in relation to symptoms of posttraumatic stress disorder (PTSD)’ (2008) 127 Acta Psychologica 645-53.

\textsuperscript{198} MacLeod 2002, above n. 190, 145-6.

\textsuperscript{199} Shaw 1995, above n. 193, 253.

\textsuperscript{200} Ibid., 249.

\textsuperscript{201} McLeod 2005, above n. 194, 974.

\textsuperscript{202} The merits of this credibility assessment strategy are suspect regardless. Some truth and deception studies have found a tendency among truth-tellers to give more detailed statements; M. Hartwig, P. A. Granhag, L. A. Strömwall & O. Kronkvist, ‘Strategic use of evidence during police interviews: When training to detect deception works’ (2006) 30 Law & Human Behavior 603-19. Others, however, have found no support for the theory that ‘deceptive statements are less detailed than truthful statements’, and have noted that one of the principle strategies that liars use to try to fool their interrogators is to make their story as detailed as possible. Granhag 2002, above n. 170, 255; Hartwig 2007, above n. 168, 220.
3.2 Gains

One study asked participants to narrate a childhood memory, and two months later asked them to tell it again. The younger participants (with an average age of twenty-eight) reported fewer than half of the same facts (46 per cent). The memories of older participants (with an average age of seventy-two) were slightly more stable; their second version contained 58 per cent of the same information. On the whole, the subjects’ second accounts contained about 40 to 60 per cent brand-new information.203

The terms ‘hypermnesia’ and ‘reminiscence’ describe the phenomenon that accounts for these results: that we often remember more and more about an event each time we call it to mind.204 When subjects are asked to describe a past experience as fully as they can, to take as much time as they need and to exhaust their memories,205 when they return to the topic again at a follow-up interview, they will usually be able to produce more information, whether the interviews are five minutes, one day or six months apart.206

In one of the first hypermnesia experiments, subjects who had watched a video of a violent burglary went from being able to describe an average of 38 per cent of the relevant details to 61 per cent, simply through repeated retrieval attempts.207 Subsequent studies have found similar results outside of the laboratory. This phenomenon is apparent when crime witnesses who have been interviewed by police are later re-interviewed by researchers; in one case, 60 per cent of the information that the subjects provided to the researchers was new.208 The new information was also

204 ‘Hypermnesia’ refers to ‘increases in net recall on successive trials’, when any information that has been forgotten is factored out, whereas ‘reminiscence’ refers to ‘gains in gross recall’, without taking into account ‘how many previously mentioned details are not provided again’. Turtle 1994, above n.180, 261.
205 In a typical study, e.g., researchers gave an initial instruction of ‘Please tell me everything you can’, and followed it up with three probes: ‘Can you remember anything else?’ ‘Can you tell me anything more’ and ‘Okay, do you think that’s everything?’ Bluck 1999, above n. 22, 674.
208 Although the researchers note that some of this increase was certainly due to the fact that the police had ‘requested fewer object descriptions’ than the researchers; Yuille 1986, above n. 33, 294.
demonstrably as accurate, a finding that has been noted predominantly, but not always, in studies where accuracy can be measured.\footnote{Bluck 1999, above n. 22; J. A. E. Gilbert & R. P. Fisher, ‘The effects of varied retrieval cues on reminiscence in eyewitness memory’ (2006) 20\textit{Applied Cognitive Psychology} 723-39; Dunning 1992, above n. 206; Scrivener 1988, above n. 207; Turtle 1994, above n. 180; Herlihy 2002, above n. 110; but see, P. Eugenio, R. Buckhout, S. Kostes & K. E. Ellison, ‘Hypermnesia in the eyewitness to a crime’ (1982) 19\textit{Bulletin of the Psychonomic Society} 83-6.} On the whole, there is little debate that hypermnesia is a ‘consistent, robust and reliable phenomenon’, and that it is common to see up to 50 per cent in net gain of largely reliable information through repeated testing.\footnote{Dunning 1992, above n. 206, 644.}

One theory for why this occurs is that ‘once a person has initiated a search in memory, the search continues’ after the initial task is over, even though the person ‘may not be consciously aware of the process’.\footnote{Herlihy 2002, above n. 110, 327.} This phenomenon helps to explain why we may wake up in the night remembering a name that we had been trying to recall during the day. Researchers also note that the act of remembering may be affected by the ‘demand characteristics’ of a memory task, by the subjects’ impression of what is being asked of them and by their desire ‘to please the interviewer by producing events about which they are being questioned’.\footnote{D. C. Rubin & A. D. Baddeley, ‘Telescoping is not time compression: A model of the dating of autobiographical events’ (1989) 17\textit{Memory & Cognition} 653-61.}

Hypermnesic effects may be compounded by the fact that ‘when people are asked to repeat information they have already given they usually assume that the first account is unsatisfactory in some way and may try to rectify this by supplying more and different details’\footnote{Cohen 2001, above n. 3, 6; Herlihy 2009, above n. 3, 181.}. The strength of the hypermnesia/reminiscence phenomenon has led one team of researchers to conclude categorically that in a forensic context ‘if a witness is inconsistent in testimony due to the addition of information, the witness should not be viewed as less credible’.\footnote{Kern 2002, above n. 206, 766.} At the IRB, however, ‘all relevant and important facts should be included’ in the first telling of the claimant’s story, and while the Member may overlook the ‘omission’ of ‘minor or elaborative details’,\footnote{Akhigbe v. Canada (Minister of Citizenship and Immigration) [2002] FCJ No. 332 at para. 16; Basseghi v. Canada (Minister of Citizenship and Immigration) [1994] FCJ No. 1867 at para. 33 (emphasis added).} a claimant whose subsequent testimony contains any significant additions (let alone 40 to 60 per cent new information) is likely to be disbelieved – even though such ‘reminiscent inconsistencies are natural, common occurrences that are frequently correct’\footnote{Gilbert 2006, above n. 209, 737.}.
3.3 Distortions

What if claimants directly contradict their previous statements? Surely then they must be lying?

Studies of memory distortion in eyewitness and autobiographical memory typically interview or survey the same subjects twice. While some have found relatively few contradictions, in a number of others around 20 per cent of the information provided by the participants on the second occasion directly conflicted with what they had reported on the first. A team of researchers re-interviewed witnesses several months after the fatal shooting of an armed robber by police. One witness, who had told the police that the robber’s car was red, told the researchers that it was either red or blue. Another ‘correctly described the automobile as being a Falcon in the police interview’, but told the reporters that it was a Chevrolet. Another at first reported that a woman at the scene had ‘rotting teeth and wore a yellow sweater and faded denims’, but later recalled that she ‘wore a red or yellow T-shirt and new denims and had very white teeth’.

Attempts to define the boundaries of these types of memory changes have had little success (there appears to be no correlation, for example, with categories such as ‘offender description’, ‘offender action’, ‘bystander description’, ‘bystander action’, and ‘objects’). And although peripheral information may be particularly susceptible to change, it seems that no area of testimony is immune. While the causes of such distortions are hotly debated, the findings from several areas of clinical exploration may be particularly relevant to refugee claimants.

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219 Yuille 1986, above n. 33, 298. In the Washington DC sniper case, several eyewitnesses famously described the suspects’ vehicle as a ‘white or cream-coloured van’, whereas in fact it was a ‘dark blue Chevy Caprice’; Sharps 2007, above n. 129, 22. These types of errors are perhaps less surprising when we consider that, even under focused laboratory conditions, when 63 participants were given a recognition task involving photographs of cars, less than a quarter could correctly identify the target vehicles; Villegas 2005, above n. 126, 27; see also, G. Davies & N. Robertson, ‘Recognition memory for automobiles: A developmental study’ (1993) 31 Bulletin of the Psychonomic Society 103-6. The researchers posit an ‘interest hypothesis’ to explain this poor performance; one study, e.g., found that men and boys recognized cars better than women and girls, who in turn were better at recognizing female faces. The researchers theorize that this may be because men and boys are generally more interested in cars, whereas women and girls are generally more interested in . . . cosmetics. Davies 1993, above, 106.
220 Yuille 1986, above n. 33, 298.
221 Brewer 1999, above n. 218, 309.
222 Herlihy 2002, above n. 110.
223 Brewer 1999, above n. 218, 309.
Researchers have long recognized that what we hear from other people may positively or negatively affect our ability to recall our own experiences. On the one hand, eyewitnesses who discuss together their memories of a crime scene may be able to describe it more accurately than those who try to recall it alone. Yet on the other hand, when we share our memories with others who have had the same or similar experiences, elements of their recollections may inadvertently become mixed with our own.

One Polish researcher interviewed recent high school graduates on two occasions four months apart and had them describe their memories of their final exam and graduation ball – events that form a famous rite of passage in Poland, one that might reasonably be considered ‘unforgettable’. Between interviews she showed them a video allegedly of another student describing her own experiences at the exam and the ball. This ‘student’ was in fact an actor and her description included a number of invented elements. When they were re-interviewed, twenty-nine of the thirty students incorporated some of these false elements into their own statements, sometimes contradicting their own previous reports. Of the fourteen false elements, eleven were incorporated by the students into their own memories. Similar results were demonstrated in another study that sought to find out whether researchers could add an accomplice to the memories of crime scene witnesses, or else remove one. Forty participants were divided into two groups and were shown ostensibly the same video of a theft – except that in reality the video shown to the first group showed the thief acting on her own, whereas in the video shown to the second group the thief had an accomplice. After watching the video, each participant was surveyed individually and was asked, among other things, whether or not the thief had had an accomplice. In these individual surveys, thirty-nine of the forty answered this question correctly. The subjects were then paired with a participant from the other group and told to prepare a joint description of the event. Of the nineteen remaining pairs, fifteen came to agree on whether or not there had been an accomplice – meaning, of course, that in each case one of the two participants had changed his or her testimony.

The participants in these types of ‘misinformation experiments’ are typically ‘unaware that they have changed their testimony or that they have been influenced by the new information’, and they ‘remain convinced that

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226 Ibid.
they are still reporting an independent memory of what they had originally observed. They often describe the incorporated ‘memories’ as very vivid; in one study, 61 per cent of the subjects whose memories contained ‘major distortions’ reported being very confident in the accuracy of their recollections (giving them a four or five rating on a scale of one to five). As the researchers note, these subjects are likely falling into the trap of believing that ‘vividness was related to accuracy’.

Researchers theorize that these types of distortions are caused by ‘source monitoring errors’, by the fact that ‘memory for the source of the information fades more rapidly than memory for the content’. Or, put another way, ‘you often have information you directly observed during the event and information told to you after the event existing side by side and you cannot remember which is which.’ In everyday life, it may be impossible to avoid this type of memory contamination – after all, ‘life is an ongoing misinformation experiment’. Refugee claimants, who often stay in shelters, may come to know others who have had similar experiences. If they should share their stories, this may in turn affect their memories.

In addition, our recollections of our own past thoughts and emotions are highly variable; over time, this class of memory in particular ‘is likely to change’. One striking study surveyed twelve school employees six months after they had survived a shooting incident, and again after eighteen months. When it came to their thoughts and feelings during the attack, all of them changed their reports significantly. Many denied on the second occasion having had particular responses that they had previously reported (such as feeling sick, feeling worried, being angry, etc.). Others claimed on the second occasion to have experienced such thoughts and emotions.

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229 Niedzwiejska 2003, above n. 225, 89.
231 Niedzwiejska 2003, above n. 225, 89.
233 Haber 2000, above n. 2, 1069 (emphasis in original).
235 Kemp 2008, above n. 104, 133, in addition, ‘researchers have frequently reported that both positive and negative affect fade with time, but that the latter fades faster’.
emotions, even though they had specifically denied them the first time. One response (I ‘thought it could happen to me/loved ones’) was changed by half of the subjects, with half of the changes in each direction. One explanation for the instability of such accounts is that there is, in fact, ‘little evidence that people actually remember what they used to think and feel’. Studies that have questioned people about their emotional states at the time of an event and then again afterwards have shown that we cannot reliably remember how happy we were on our vacations or how stressed we were during our exams or how upset, worried, sad or angry we were upon learning upsetting news. Researchers propose that when we are unable to access such information from memory, our self-concept helps us ‘to fill in the gaps’: we subconsciously use what we know about ourselves to infer what we must have thought or how we must have felt. As our self-concept evolves, our inferences change. Refugee claimants are regularly probed about their past thoughts and emotions at a time in their lives when their self-concept may be changing rapidly as they adjust to a new environment. There is every reason to think that these types of memories in particular will be especially liable to change.

Another finding of particular importance for refugee claimants is the fact that, although there is some evidence that negative events may in general be remembered better than positive ones, memories of shocking and upsetting events are certainly not immune to distortion. Over thirty years ago, psychologists Brown and Kulik famously coined the term

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238 Kemp 2008, above n. 104.
242 This is in keeping with other studies that have demonstrated a ‘hindsight bias’ in other memory contexts. These studies have shown that ‘memories may be altered to confirm with current beliefs and attitudes’, that through involuntary processes our recollections ‘can be edited in the light of later experiences’. Williams 2008, above n. 33, 78.
‘flashbulb memory’ to describe an unusually vivid memory of a shocking, usually negative, event. The term is perhaps misleading; as others have recently pointed out, even Brown and Kulik agreed that ‘such memories, while vivid, are far from complete and are not perfect, immutable photographs of the past experience’.244 Rather, ‘flashbulb memories seem to be subject to the same kinds of reconstruction and error over time as other memories’245 and they ‘often change over time, unbeknownst to the rememberer’.246 As observed in a recent and comprehensive review of flashbulb memory research to date, ‘All researchers agree’ that such memories may become distorted,247 although whether or not they are more consistent than other types of autobiographical memories remains the subject of debate.248 Some researchers have documented cases where memories of shocking emotional events do ‘exhibit remarkable persistence, clarity and detail’.249 Others, however, conclude that while flashbulb memories ‘are distinguished from ordinary memories by their vividness and the confidence with which they are held’, there is ‘little evidence that they are reliably different from ordinary autobiographical memories in accuracy, consistency or longevity’.250 Regardless, the fact that such memories can change a great deal over time and can be ‘remarkably inaccurate’251 has been conclusively demonstrated.

One study tested the consistency of Canadian university students’ memories for the terrorist attacks of September 11, 2001. The researchers surveyed 1,400 students shortly after the attacks and again eight months later, and asked them how they had heard the news: where they were, who they were with, and what they were doing. At the second testing, ‘the overall level of consistency’ was ‘poor’. More than one in ten students (11.8 per cent) had clear and vivid memories of where they had been, who they had been with, and what they had been doing on perhaps the most memorable morning in recent history – that were wrong on all counts.252 In another

246 R. J. McNally, Remembering Trauma (Cambridge: 2003), 55.
247 D. B. Pillemer, “Hearing the news” versus “being there”: Comparing flashbulb memories and recall of first-hand experiences’ in Luminet 2009, above n. 244, 125-40 at 138.
249 Williams 2008, above n. 33, 69; for a review, see McNally 2003, above n. 246, 53-5.
250 J. T. Talairco & D. Rubin, ‘Flashbulb memories result from ordinary memory processes and extraordinary event characteristics’ in Luminet 2009, above n. 244, 79-97 at 92.
study with a similar methodology, ‘only 65 per cent of the personal event information given after six months was the same as that given after one week’.253 Another found that its subjects’ memories for the events of September 11th were no more consistent than their memories for the everyday events of the weekend preceding the attacks.254 As yet another similar study concluded, ‘There was very little evidence to suggest that September 11th led to highly detailed and veridical autobiographical records of the day’.255

These studies were building on a famous earlier experiment that had tested its subjects’ memories for the explosion of the Challenger space shuttle. The Challenger study had asked participants to describe the circumstances under which they had heard the news, first one day after the explosion and again about two years later. Most of the accounts ‘showed major discrepancies’; in total, only 7 per cent of the participants gave completely consistent accounts, compared with 25 per cent who were ‘inconsistent on all questions’.256 One subject reported the following after twenty-four hours:

I was in my religion class and some people walked in and started talking about it . . . then after class I went to my room and watched the TV program talking about it and I got all the details from that.257

Here is the same subject, two years later:

When I first heard about the explosion I was sitting in my freshman dorm room with my roommate and we were watching TV. It came on a news flash and we were both totally shocked.258

Similar results were reported for the announcement of the O.J. Simpson verdict. Students were tested three days after the verdict, and again after fifteen months and thirty-two months. After fifteen months, 10 per cent of the accounts contained ‘major distortions’; after thirty-two months, the percentage had risen to 42 per cent. In a typical example, one subject reported after three days:

I was in the Commuter Lounge at Revelle [College] and saw it on T.V. As 10:00 approached, more and more people came into the room. We kept having to turn up the volume, but it was kind of cool. Everyone was talking.259

256 Neisser 1992, above n. 230, in van Giezen, above n. 251, 945.
257 Neisser, ibid., in Zola 1998, above n. 230, 926.
258 Ibid.
259 Schmolck 2000, above n. 230, 41.
The same subject after thirty-two months reported:

I first heard it while I was watching TV. At home in my living room. My sister and father were with me. Doing nothing in particular, eating and watching how the news station was covering different groups of viewers just waiting to hear the verdict. I think that the focus was mostly on law students and their reactions to the verdict.260

One explanation that has been suggested to account for these types of inconsistencies is that they may be the result of ‘time-slice errors’. On the subsequent tests the subjects may be recalling a later related event and misattributing it to ‘the first time I heard the news’.261 When the students in the O. J. Simpson study were asked about their inconsistent statements, many ‘claimed that both events occurred’. The researchers theorized that these students ‘may have reported an event associated with receiving news regarding the trial, but not the event requested’.262 Time-slice errors may explain some of the distortions that refugee status decision makers frequently encounter.

Subsequent studies suggest that when subjects are personally involved in a shocking event, as opposed to simply learning about it, their memories for its central elements (‘location, activity, and others present’) may be much more consistent.263 On the other hand, the eyewitness study mentioned at the beginning of this section is cited as a classic example of a ‘real’ and ‘traumatic’ flashbulb memory of a directly experienced event and, as set out above, the distortions in the subjects’ memories for details are striking. In addition, studies of soldiers, peacekeepers, and crime victims show some of the most dramatic examples of memory distortions for even the central elements of lived events.265 One typical study surveyed

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260 Ibid.; for a comprehensive review of other emotional memory consistency studies, see, R. G. Winningham, I. E. Hyman Jr. & D. L Dinnel, ‘Flashbulb memories? The effects of when the initial memory report was obtained’ (2000) 8 Memory 209-16.


262 Hyman, ibid., 940-1


Desert Storm veterans shortly after their return home and again about two years later. The veterans were asked 19 ‘yes/no’ questions about their experiences in the war: Did you see ‘others killed or wounded?’ Did you see ‘bizarre disfigurement of bodies?’ Did you ‘observe the death of a close friend?’ Eighty-eight percent changed at least one of their answers; just under one in ten (8 per cent) changed a third of their answers (for the three questions above, the change rate was 27 per cent, 33 per cent and 8.5 per cent respectively). The changes ran in both directions, with 70 per cent claiming to have experienced something at the second interview that they had denied at the first, and 46 per cent specifically denying at the second interview something that they claimed to have experienced at the first.266

The literature on trauma memory, which as noted at the outset is beyond the scope of this article, is doubtless crucial to understanding not only these findings, but also many of the memory distortions encountered in the refugee hearing room. It is worth noting, however, that whereas several of the above studies found a link between these kinds of memory shifts and the subjects’ diagnoses of Post Traumatic Stress Disorder (PTSD),267 another found no significant PTSD correlation.268 This suggests, at the very least, that other psychological factors may be acting on these types of memories. Researchers propose ‘a number of possible explanations’ for these changes other than trauma: for example, ‘processes of social desirability’ may lead the subjects to give answers ‘that are more in concordance with how they want to present themselves’; they may interpret questions differently over time; their answers may differ depending on ‘differences in context, mood or attention’; or their memories may have been influenced by ‘postevent information’ such as media reports.269 Whatever the cause or causes of these types of memory distortions, it is clear that memory for shocking and upsetting events is not immune to significant change.

When a claimant’s testimony has changed, the decision maker may well question the accuracy of her recollection on the point in question, although eyewitness research has demonstrated that consistency in testimony is not ‘a strong predictor of overall accuracy’.270 The most consistent witnesses are not reliably the most accurate, for two reasons: a witness who

266 Southwick 1997, ibid. Some researchers have suggested that our memories may show more consistency when the first test is delayed: Winningham 2000, above n. 260. Yet in one study, similar results were found even when the first interview was held a full three years after the subjects had returned home from the war-zone. As in Southwick 1997, ibid., between this first delayed interview and the second a year later, 88 per cent of the respondents changed at least one of their answers and 12 per cent changed more than a quarter. Bramsen 2001, ibid.


268 Bramsen 2001, above n. 265.

269 Ibid., 739.

significantly misremembers one aspect of an event may nonetheless remember others very clearly, and people can misremember important details and still correctly recall the general gist of a situation. When IRB Members focus on these types of distortions at a refugee hearing, however, they are hardly ever interested in the accuracy of the point in question. Whether the car was red or blue, whether it was a Chevrolet or a Falcon is normally irrelevant. Instead, decision makers are interested in the simple fact that the claimant’s story has changed, and what this says about her credibility. Yet what these many studies have documented are common failures of memory, not of honesty.

A very few people have astonishingly stable memories, but for most of us, substantial memory changes are common and well documented. In light of this, and until more is known about why and under what circumstances these kinds of distortions occur, when contradictions do arise in a claimant’s testimony the decision maker cannot mechanically assume that he is a liar who cannot keep his story straight.

3.4 A note about test conditions
Many refugee claimants have two potential advantages that the subjects in most of these consistency studies did not. First, if they have competent counsel, they will very likely have reviewed their previous statements ahead of time. This may reduce the inconsistencies arising in their testimony, although researchers controlling for this variable have found that it had ‘strikingly little effect’: their ability to review their previous statements ‘did not inhibit witnesses’ tendency to recall new details’ and ‘neither did it improve or refresh their memory as intuition might predict’. This may be because, as noted above, people recounting their own memories in investigations generally ‘try to remember what they actually have experienced’ rather than ‘what they have said in previous interrogations’.

In addition, unlike the subjects in many of these studies, who were asked to recall events that they may have had little cause to think about between

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273 A recent study found that members of the Swedish Migration Board, e.g., relied on contradictions ‘to a relatively large degree’, which the researchers cautioned may be ‘a too simplistic’ approach; Granhag, Migration 2005, above n. 167, 43. As another researcher noted in regard to the sixty-two participants in his study, all but two of whom made contradictory statements at their second interview, ‘virtually all of the witnesses’ testimonies would have been vulnerable to being discredited to some degree’, despite their truthfulness and overall accuracy: Brewer 1999, above n. 218, 310.
275 Turtle 1994, above n. 180, 226; see also, Bidrose 2000, above n. 111, where the subjects’ ability to review physical evidence had similarly little effect on their memories.
tests, refugee claimants are recounting experiences that they may have thought about often (although many claimants, of course, describe pushing these thoughts from their minds, an ‘avoidant memory style’ that is a well-documented response to negative life events). There is good evidence that ‘memories which are often recalled or thought about are remembered more vividly’ than those that are called to mind infrequently. While they may be more vivid, however, such memories are ‘not significantly more stable’; researchers controlling for this variable have found major changes even in oft-recalled memories.

Whether or not these potential advantages indeed benefit claimants as minimally as the evidence suggests, they must also be balanced against three serious disadvantages. Taken together, these suggest that claimants will exhibit as much, if not more, inconsistency in their testimony than that which has been reported in the research.

The first is the standard use of inconsistent retrieval methods by refugee status decision makers. Two of the main types of questions asked of subjects in memory research are ‘free recall’ questions, in which they are simply asked to set out what they remember in as much detail as possible (‘Describe all of the significant events and reasons that led you to seek protection in Canada’), and ‘cued recall’ questions, in which the researcher or investigator guides the subjects’ recollection with specific prompts (‘And then what did he say?’; ‘Did she do anything else?’; ‘Was anyone else there?’). As many studies have shown, these different types of cues will elicit different types of information. As a result, ‘in order to assess (in) consistency, assessments using exactly the same instrument should be performed’, because ‘if different retrieval cues are used at Tests 1 and 2, then different recollections will emerge on the two tests’. Inconsistent cueing ‘significantly’ increases hypermnesia. It will produce ‘quite different estimates’ of dates, as will asking for exact dates rather than relative time estimates. Frequency estimates will change depending on ‘the

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278 Anderson 2000, above n. 181, 440; Betz 1997, above n. 8.
279 Anderson 2000, above n. 181, 440.
284 Loftus 1990, above n. 18, 332; Sudman 1984, above n. 52.
use of closed or open-ended questions; and, as noted above, ‘the way in which questions are asked’ can similarly produce ‘very different estimates of the duration’ of an event. The sequence of events and event components, instances of repeated events, and the content of conversations are all better brought to mind by cued rather than free recall, as are older memories that have simply faded with time. Researchers have also suggested that these effects may be compounded when the retrieval method shifts between ‘face-to-face’ interviews and ‘self-administered questionnaires’.

In light of these findings, it has been suggested that criminal investigators make a practice of varying retrieval cues to try to obtain as much different information as possible. And one likely could not design a retrieval methodology that would produce greater inconsistencies than one that gives its subjects a self-administered free recall form to fill out and then invites them to a face-to-face interview and asks them cued recall questions.

The second disadvantage for claimants is the passage of time. Most of the studies on memory consistency span relatively short time periods compared with the average time that a claimant will spend in the refugee claim process. Even so, the researchers note two key ‘retention interval effects’: the more time passes between tests, the lower the subjects’ consistency; and the more time passes, the more likely it is that an event will slip their minds entirely on an open-ended survey question. The latter often leads to ‘gross under-reporting of even distinctive events’. One typical study asked its subjects whether they had ever been hospitalized; the respondents ‘failed to report only 3 per cent of hospitalizations when asked within 1 to 10 weeks of the event, but failed to report 42 per cent of hospitalizations when asked 1 year after the event’. Another asked its subjects whether they had ever been in an automobile accident ‘that had resulted in their own personal injury’. Of those who had suffered such an accident within the last three months, hardly any (4 per cent) failed to note it; but of those for whom the incident had occurred nine to twelve months earlier, more than a quarter (27 per cent) failed to report it. Similar results have been

290 Campos 2006, above n. 154; Pezdek 1993, above n. 159, 305.
293 Gilbert 2006, above n. 209, 735.
298 Belli 2001, ibid., 46.
found for periods of unemployment and crime victimizations. The problem is not that by the second test the subjects in these studies have genuinely forgotten their hospitalization, car accident or victimization. Rather, their memories of these events are somehow not triggered by the free recall question. This presents obvious challenges for refugee claimants and survey methodologists alike.

The third disadvantage for the claimant is, of course, the ‘herd of elephants’ in the hearing room: the cultural and gender factors, trauma, stress, fatigue, and language and interpretation issues, to name a few. As Herlihy and Turner point out, a refugee claimant recalling an experience is ‘constructing an account of that event, within a social or conversational context.’ In determining how that memory will be framed as a narrative, ‘the entire social context – involving the interviewer, the interviewee, and the context of the interview – has a part to play.’ Herlihy and Turner emphasize forcefully that many aspects of the social context at a refugee hearing may undermine the claimant’s ability to recall her experiences.

The Federal Court of Canada has wisely noted that ‘A refugee claim should not be decided on the basis of a memory test.’ If it were, such test conditions would be strikingly unfair.

4. Conclusion

In truth and deception studies, the subjects who had been instructed to lie reported using a number of strategies to try to convince their interrogators, such as: ‘Include many details’, ‘Avoid saying things that [are] not true’, ‘Stick with the story’, and ‘Try to make the story seem spontaneous’. Those who had been instructed to tell the truth provided only two: ‘Tell the truth like it happened’, and try to be ‘cooperative’. Many

301 For a sense of the latter, see, Sherpa v. Canada (Minister of Citizenship and Immigration) [2009] FCJ No. 665, in which the Court found that an interpreter was ‘sufficiently precise and competent to convey [the claimant’s] words on the material points of concern’, even though she had on several occasions mistranslated the Board’s questions to the claimant, and had ‘inaccurately translated her answers and explanations, as well as adding words she had not said’; even though she had on 270 occasions used English words in interpreting to the claimant; and even though she ‘acknowledged during the hearing that [the claimant] was having difficulty understanding her because they were from different localities and had different accents’ (at paras. 23-4, 57).
302 Herlihy 2009, above n. 3, 179.
303 Ibid., 180.
304 Sheikh v. Canada (Minister of Citizenship and Immigration), above n. 1, para. 28.
305 Hartwig 2007, above n. 168, 220.
of the truthful subjects reported: ‘I did not need a strategy because I am innocent’.306 The researchers remarked that the truth-tellers’ plan simply to tell the truth ‘did not appear to serve them well’.307 They were often disbelieved.308

As noted above, professional lie-detectors as a rule have ‘hit rates just above the level of chance’,309 and they ‘tend to be overconfident in their judgments’.310 Refugee status decision makers face a typical compounding challenge: experience alone will not help them to improve. Since they can rarely verify whether or not their decisions were correct, they are rarely able to learn from their mistakes.311 Researchers propose a ‘feedback hypothesis’ – a theory that without such feedback ‘mere on-the-job experience is not enough . . . to improve lie detection accuracy’ – to help explain why the credibility assessments of Swedish Migration Board Members failed to improve over time (although the Members became more confident in their judgments),312 or why, in another study, the subjects who performed fewer lie detection exercises were more accurate than those who performed more,313 or why, in a number of experiments, experienced lie catchers, such as veteran police detectives, were no better than university students at making credibility assessments.314 As the researchers in several

306 Ibid., 224.
307 Ibid., 225.
311 As the researchers note, such decision makers ‘rarely receive any reliable outcome feedback about the correctness of their veracity assessments’; Granhag, Migration 2005, above n. 167, 30.
313 Strömwal 2003, above n. 167.
314 S. M. Kassin, C. A. Meissner & R. J. Norwick, ‘“I’d know a false confession if I saw one”: A comparative study of college students and police investigators’ (2005) 29 Law & Human Behavior 211-27; B. M. DePaulo & R. L. Pfiefier, ‘On-the-job experience and skill at detecting deception’ (1986) 16 Journal of Applied Social Psychology 249-67; for a review, see, P. Ekman & M. O’Sullivan, ‘Who can catch a liar?’ (1991) 46 American Psychologist 913-20 at 913. A noted exception were US Secret Service agents, whose lie-detection accuracy in one famous study was found to be significantly higher than average, possibly because they had learned to rely more heavily on ‘non-verbal’ cues; Ekman 1991, above; and P. Ekman & M. O’Sullivan, ‘Who is misleading whom?: A reply to Nickerson and Hammond’ (1993) 48 American Psychologist 989-90. Other studies have since found that other professionals who similarly rely on ‘behavioral clues’ are also able to achieve better-than-average lie-detection accuracy; P. Ekman, M. O’Sullivan & M. G. Frank, ‘A few can catch a liar’ (1999) 10 Psychological Science 263-6. However, for a recent methodological criticism of these studies, suggesting that the better-performing subjects may in fact have had an unfair advantage, see, C. F. Bond Jr., ‘Commentary: A few can catch a liar, sometimes: Comments on Ekman and O’Sullivan (1991), as well as Ekman, O’Sullivan, and Frank (1999)’ (2008) 22 Applied Cognitive Psychology 1298-1300.
such studies concluded, the veteran detectives were no more accurate, just more confident and more biased.\textsuperscript{315}

The purpose of this article is to help refugee status decision makers to make better credibility determinations. One of the main ways in which lie detectors can improve is by learning to ‘avoid paying attention to non-diagnostic cues’.\textsuperscript{316} While gaps or inconsistencies in a claimant’s testimony may in some cases reasonably lead to a negative finding, the research makes it abundantly clear that such aspects are often misleading. They should be approached ‘with great caution’.\textsuperscript{317} ‘They should never be used ‘in a mechanical fashion’,\textsuperscript{318} and, crucially, the bar must be set much lower. One consistently striking feature of these many memory studies is just how low the researchers set the bar. In the language of memory researchers, even ‘excellent memory’ is very far from perfect, and still ‘inevitably’ becomes distorted.\textsuperscript{319} A subject demonstrates a ‘high degree of consistency’ when she directly contradicts only 20 per cent of her previous testimony,\textsuperscript{320} and is doing ‘relatively well’ when she misremembers only 20 per cent of her most memorable personal event dates from within the last ten weeks.\textsuperscript{321} Such a claimant would be judged a liar by many IRB Members.\textsuperscript{322}

Criminal judges, prosecutors and police must regularly decide not only whether a witness is credible but also whether her memory is reliable: an accused’s liberty may depend on whether the car was red or blue. Refugee status decision makers, in contrast, must decide whether the fact that the

\textsuperscript{315} The bias to which the researchers refer is ‘investigator bias’, the tendency of those looking for deception to find it where none exists; Kassin 2004, ibid., 213.

\textsuperscript{316} A. Vrij, ‘Why professionals fail to catch liars and how they can improve’ (2004) 9 Legal and Criminal Psychology 159-81 at 171.

\textsuperscript{317} Granhag 2003, above n. 170, 864.

\textsuperscript{318} Granhag, Migration 2005, above n. 167, 43.

\textsuperscript{319} McNally 2003, above n. 246, 125, 117.

\textsuperscript{320} Yuille 1986, above n. 33, 296.

\textsuperscript{321} Betz 1997, above n. 8, 713.

\textsuperscript{322} While the reality in the hearing room is often different, it is worth noting that a lowered bar is certainly in keeping with the IRB’s official policy. The Board’s training materials sensibly instruct Members as follows: ‘Remember - sworn testimony is presumed true’; ‘Do Not Expect the Witness to Have Perfect Recall: Refugee claimants, like all people, and sometimes with more justification than most, may be unable to recall some information. Times, dates, locations, distances, external events, and even significant personal experiences may be forgotten or distorted by time’; and ‘Do Not Press the Witness For Too Many Details: People do not perceive all of the details of any given event and if you press witnesses for too much detail, they may unconsciously ‘fill’ in the details they can’t remember’. Immigration and Refugee Board, ‘IRB Questioning Techniques’, undated, 13.
car was red and is now blue is enough to displace the presumption that a claimant who has sworn to tell the truth is telling the truth to the best of her ability.\textsuperscript{323} The more they understand about how memory works, the better their decisions will be.

\textsuperscript{323} In Canada, this presumption has the force of law: \textit{Maldonado v. Canada (Minister of Citizenship and Immigration)} [1979] FCJ No. 248. For a review of its role internationally in the refugee context, see, M. Kagan, ‘Is Truth in the Eye of the Beholder – Objective Credibility Assessment in Refugee Status Adjudication’ (2003) 17 \textit{Georgetown Immigration Law Journal} 367-415. Kagan concludes: ‘Forcing applicants to “prove” their credibility would impose an effective limit on the protection accorded by the Refugee Convention, which is not authorized by the treaty and which many genuine applicants could not overcome. Given that credibility is not an actual criterion for refugee status, applicants cannot be expected to establish credibility as if it were part of their burden of proof. Rather, applicant testimony is a means by which asylum-seekers can prove the substantive criteria for refugee status. These considerations call for beginning refugee status determinations with the presumption that the applicant will be truthful, which can be rebutted if there is substantial reason to reject credibility’, 374.