



Forgetting

Myths, Perils and
Compensations

DOUWE DRAAISMA

Translated by Liz Waters

FORGETTING

FORGETTING

MYTHS, PERILS AND COMPENSATIONS

DOUWE DRAAISMA

Translated by Liz Waters

YALE UNIVERSITY PRESS
NEW HAVEN AND LONDON

Published with the support of the Dutch Foundation for Literature.

English translation copyright © 2015 Liz Waters

Originally published in Dutch by Historische Uitgeverij as *Vergeetboek* © 2010
Douwe Draaisma

All rights reserved. This book may not be reproduced in whole or in part, in any form (beyond that copying permitted by Sections 107 and 108 of the U.S. Copyright Law and except by reviewers for the public press) without written permission from the publishers.

For information about this and other Yale University Press publications, please contact:

U.S. Office: sales.press@yale.edu www.yalebooks.com

Europe Office: sales@yaleup.co.uk www.yalebooks.co.uk

Typeset in Arno Pro by IDSUK (DataConnection) Ltd

Printed in Great Britain by TJ International Ltd, Padstow, Cornwall

Library of Congress Cataloging-in-Publication Data

Draaisma, D.

Forgetting : myths, perils and compensations / Douwe Draaisma.

pages cm

Includes bibliographical references and index.

ISBN 978-0-300-20728-6 (hardback)

1. Memory. 2. Recollection (Psychology). 3. Cognitive psychology. I. Title.

BF371.D68124 2015

153.1'25—dc23

2014045931

A catalogue record for this book is available from the British Library.

10987654321

Contents

Forgetting: An Introduction	1
1 First Memories: Islands in the Stream of Forgetting	10
2 Why We Forget Dreams	32
3 In Memory of Henry M.	57
4 The Man Who Forgot Faces	76
5 A Slope, Followed By an Abyss	87
6 Your Colleague Has a Brilliant Idea – Yours	98
7 The Galileo of Neurology	107
8 On Repression	126
9 The Myth of Total Recall	158
10 The Memory of the Esterházys	179
11 The Mirror That Never Forgets	193
12 The Second Death	217
13 The Art of Forgetting	238
Questions About Forgetting	246

Notes 249

Illustrations 264

Index 265



The archives of the Dutch province of Drenthe.

Forgetting: An Introduction

If only this could be your memory. A spacious room. The light falls in through high windows. Everything is clean and orderly. Your memories stand in rows along the walls, meticulously updated, noted down and indexed. Just walk over to them and pull out a book or a folder. Untie the ribbons, leaf through a few pages and you will soon have your hands on what you were after. Go to the table and spread your discovery out over the polished tabletop. Take a seat. You have plenty of time. It is quiet in here; no one will disturb you. When you have finished reading, you can fold all the papers together again, tie the ribbons and put the folder back. You look around the room for a moment and run your eye across the volumes, which brighten solemnly in response, and then pull the door shut behind you, calm in the knowledge that everything will remain undisturbed until your next visit. Because you can be certain no one comes in here except you.

It may not be everyone's deepest desire to have a memory like a room in the archives of the Dutch province of Drenthe, but imagine: all your memories with the dust kept off, folded away on acid-free paper, with perfect air conditioning, an index that makes it easy to find everything and above all the assurance that even items not consulted in 50 or 60 years will emerge in perfect condition. Which of us does not cherish the ideal of a memory in which all our experiences are kept safe?

When contemplating memory, we think in metaphors. There is no other way. Plato imagined memory as a wax tablet on which our

experiences are inscribed, a view reflected in the word 'impression'. Later philosophers retained this writing metaphor, although with each innovation it was expressed in a new and different way: the wax tablet was succeeded by papyrus and parchment, and memories were written down in a codex or in books. Other metaphors made the memory a storeroom, either for information, like a library or archive, or for goods, like a wine cellar or warehouse. In the nineteenth century, neurologists began to look at memory with the latest techniques for preserving information in mind. Soon after 1839, the 'photographic memory' made its entrance, then the phonograph (1877) and film (1895) left their stamp on the theories of their day. Psychologists have continued in the same vein; the memory was later compared to a hologram and eventually a computer. Whatever may have changed between the wax tablet and the hard disc, our ideas about memory still stick firmly to the paths laid down by metaphors.¹

What all these metaphors have in common is that they focus on conservation, storage and recording. In essence, metaphors of memory are museological constructs, encouraging us to imagine memory as the ability to preserve something, preferably everything, wholly intact. That this seems utterly logical is precisely the problem. Because in truth memory is dominated by forgetting.

Immediately after the outside world reaches us, forgetting takes charge. The five sensory registers, where sensory stimuli are initially processed, are equipped for an extremely short stay. Anything not quickly taken onwards from there will vanish. Of the five registers, the one dealing with visual stimuli has been researched in the greatest detail. In 1960, American psychologist George Sperling discovered that what is now known as the iconic memory can hold on to stimuli for no more than a fraction of a second.² He presented his test participants with 12 letters, arranged in three rows of four and exposed for just 50 milliseconds. Then he immediately asked them to reproduce the first, second or third row. They did not know beforehand which row Sperling would choose. On average they could recollect three of the four letters. It seems that in the instant after it was presented, the image, known as the icon, was still available almost in its entirety, but only if Sperling indicated within a quarter of a second which row he was after. If he waited just a little longer, 300 milliseconds rather than 250, the icon was blotted out. If when the first row had been reproduced he asked for a second or third, then the

information was no longer available. In the few seconds it took to reproduce one row, the others disappeared.

This rapid erasure occurs in the other sensory registers as well, although the memory for sounds (known as the echo box) holds on to stimuli a little longer, for between two and four seconds. The retention of stimuli is necessary to enable sensory information to be processed without disturbance. It is only because the icon remains in place for a moment that our perception is uninterrupted when we blink. This brief retention allows us to experience 24 separate images per second projected onto a cinema screen as a single fluid movement, a movie. But erasure is just as essential. If the information was held just a little longer it would start to interfere with the stimuli that came next. The absence of forgetting would not create an improved memory but instead a growing confusion.

Are our senses trying to tell us something? This rapid erasure is the opposite of the ideal suggested by our metaphors of an archive or a computer. Forgetting is not a shortcoming of sensory memories but integral to the way they work. Is this the function of forgetting in other forms of memory as well? Does it always in fact have a function? And what is the best way of formulating the question: 'What causes us to forget?' or 'What purpose does forgetting serve?' Are we at the mercy of our neurological and physiological wiring or do we have some kind of say? However helpful metaphors of memory may be, they lead us away from associations with forgetting, which is perhaps one of the reasons why theories about forgetting rarely get beyond assumptions of the kind that are no more plausible than their opposites.

This lack of finesse pertains even at the level of language. The language games that have developed around memory are inventive and vivid. The language of forgetting is poor by comparison. For a start, the verb 'to forget' has no accompanying noun. What you remember is called a memory, but what you forget is called a —? There is a gap in the language, and as a consequence no place for adjectives either. A memory can be vague or clear, pleasant or painful, but the thing you forget is only an absence, a nothingness, without attributes or qualities.

Even as a verb, 'to forget' has no real autonomy. As in 'forgo' or 'forbid' the prefix 'for' in 'forget' makes the word mean the opposite of 'get'.³ Forgetting is a derivative concept, a negation: it is what you end up with when you think about remembering and then consider its opposite.

No less troubling is the contrast between the metaphors we use for the kind of memory that conserves our experiences and our metaphors for forgetting. Those in the former category have a certain allure. Writing is perhaps the most important invention of our entire cultural history, and archives and libraries are institutions that command respect. We compare memory to abbeys, theatres and palaces. Psychology has always chosen the most advanced and prestigious technologies for its metaphors of memory. Anyone who compares metaphors for forgetting with those for remembering – the sieve with the photograph, the colander with the computer – will have a poignant but realistic picture of the developmental gap between the two language games. Forgetting is forced to make do with an awkward reversal of memory metaphors. If we have forgotten something, then the wax tablet was too dry to receive an imprint, the ink has faded, the text was scraped from the parchment, someone pressed ‘delete’, or the information is no longer on the hard disc. Forgetting has never been much more than erasure, deletion or disappearance.

This reversal of metaphors for memory reinforces our intuition that remembering and forgetting are opposites and therefore mutually exclusive. What people remember has apparently not been forgotten and what they have forgotten they must be unable to remember. Forgetting is the minus sign applied to remembering. But this is an instance of being bewitched by our own metaphors. In reality, forgetting exists within remembering like yeast in dough. Our memories of ‘first times’ of various sorts remind us of all the forgotten times that followed. The handful of dreams we recall point to the hundreds of dreams remembered on waking that quickly evaporated. Even people with good memories for faces have bad memories for the history of faces. Which of us can honestly claim to recall, without recourse to photographs, what the people close to us looked like 10 years ago? In our lazy dichotomy of remembering and forgetting, where do we place the memory of an event that we realise we remember differently now from the way we once did? The relationship between memory and forgetting is more like the shared outline in a gestalt drawing: we can see this figure or that in it at will.

In writing this book, I spent three years consistently trying to detect the element of forgetting contained in memories. It seems the most difficult questions we can ask about memory concern forgetting. Why do we

have techniques for remembering but not for forgetting? If we did have them, would it be wise to use them? What is the fate – or the abode – of repressed memories? Do repressed memories actually exist? Why does a portrait tend to erase our memory of a face? Why do we have such a poor memory for dreams? Why might a colleague remember your idea but forget it was yours? What is so seductive about the notion that our brains create permanent traces of everything we experience, in other words the hypothesis of total recall? Why does a man with Korsakoff's syndrome retain part of his old professional know-how but forget what he said five minutes ago? What has gone wrong in the brain of someone who cannot remember faces?

In 2007 psychologist Endel Tulving decided to keep a tally of all the different kinds of memory mentioned in the literature.⁴ He arrived at a figure of 256. No one is certain whether there are quite so many kinds of forgetting, but it is undoubtedly a number sufficient to deter us from trying to chart them all; rather, it is a number that invites us to be selective.

My first consideration in making a selection was that I would have to include the kind of forgetting that occurs in autobiographical memory, which attempts to record the events of our lives and attracts our attention, indeed worries us, when it fails to do so. This gave me my opening chapter for the book, since we will forget a great deal in our lives but never so obviously as in the first two or three years after we are born. Our earliest memories accentuate the forgetting that surrounds them, and by examining them closely we discover within them the processes of forgetting that later make us forget far more. What we can learn from our earliest recollections is that the emergence of language and self-consciousness helps the memory to develop, while at the same time closing off access to earlier events. A door opens in front of you only after the door behind you has shut.

Dreams pull the door closed behind them almost immediately. We have a notoriously poor memory for dreams. But as with those fragile first memories, the forgetting of dreams can clarify something about how memory works. When we wake up we remember – if we are lucky – the final scene of the dream, and we often begin the difficult task of searching back against the direction of time for what came before the final scene and what happened before that. Why do our memories have so much trouble

with this reversed chronology? What can we learn about dreams by looking at the causes of their transience?

A second consideration in making my selection was the desire to show that pathological forms of forgetting can furnish unexpected insights into memory processes. In 1953, Henry Molaison, then aged 27, underwent a radical brain operation intended to bring his epileptic fits under control. The outcome was disastrous. A sizable portion of the hippocampus was removed from both sides of his brain and as a result Henry lost the ability to form memories. He spent the rest of his life locked in a present that was less than half a minute long. His brain damage made him the perfect participant in brain experiments. His career as 'Henry M.' lasted more than half a century and made him the most famous experimental subject in the literature of post-war neuropsychology. He died in December 2008, and in this book I try to honour more than simply the test participant in him.

In that same literature of neuropsychology, 'soldier S.' is no more than a footnote. In March 1944 he suffered a serious injury to his occipital lobe as the result of an exploding shell on the German front line. It caused an extremely specific memory disorder: S. could no longer remember faces, nor could he spot familiar faces. When he came upon his mother in the street he walked straight past her. He could not even recognise his own face in the mirror. The case of soldier S. led to the identification in 1947 of a disorder known as 'prosopagnosia' or 'face blindness'. Over the past few years it has become clear that a congenital form of this syndrome exists, and that it is far more common than was previously thought.

The brain damage that causes the syndrome named after Sergei Korsakoff produces the most drastic form of forgetting known to us, since it reaches through time in both directions. Large areas of the past are erased and the future is affected as well, since new experiences are not laid down in the memory. It makes the patient an invalid, although such patients are often remarkably relaxed and accepting of their handicap, being unable to recall many reasons to complain. For a long time it was thought that the semantic memory, the memory for facts and meanings, was spared in Korsakoff's patients, but experiments involving one Professor Z. – not a researcher but a patient – have refuted that notion. Several years before the syndrome struck, Z. wrote his autobiography, so it was possible to carry out tests using material that had without doubt

once been lodged in his memory. The tests showed that even his semantic memory had gaps in it and that those lacunae were larger when the questions he was asked related to a more recent past. His case demonstrates the insidious progress of Korsakoff's syndrome: a slope, followed by an abyss.

Henry M., soldier S. and professor Z. suffered varieties of forgetting that we will not experience if we remain healthy, but even aside from cases of pathological memory loss, forgetting furnishes us with knowledge about memory processes. Over the past 20 years, attempts have been made to understand through experimentation a phenomenon known as 'cryptomnesia', whereby you arrive at an apparently original idea that you later turn out to have heard from someone else or to have read somewhere. It can occasionally be the cause of what has perhaps rather generously been called 'unconscious plagiarism'. In the laboratory, cryptomnesia can be replicated through subtle manipulation of the processes of forgetting. The trick is to mix just enough forgetting with remembering at just the right moment, such that the memory concerned does not disappear but is no longer recognised as a memory.

A third consideration was that an attempt needed to be made to uncover the roots of current ideas about forgetting, which go back a long way. In the defence by many people of the theory that our memories retain permanent traces of everything we experience, we see residues of neurological experiments carried out in the 1930s. Today's notion of 'repression' has associations redolent with ideas formulated by Freud from 1895 onwards. We still talk about 'burying' traumas and believe they can reside in the unconscious, from where they cause mischief. In recent debates, such as those about 'recovered memories', metaphors are used that were introduced by psychoanalysis and have played upon our intuitions about forgetting for more than a century. It is possible to go back even further. The notion that one part of the mind has no idea what is going on in another part was put into words long before Freud by a London family doctor nobody has heard of today. His name was Arthur Wigan. In 1844 he claimed that the right and left halves of the brain each have their own consciousness and memory. His theory convinced no one in its day and there are still good reasons for dismissing it, but much of what Wigan – who saw himself as 'the Galileo of neurology' – was able to explain with his two brains, Freud would derive half a century later from

the relationship between the conscious and unconscious parts of our minds.

My most important aim of all in making my selection, however, was this: to show that the study of forgetting confirms what we hope or fear about our memories, namely that they have a disturbing ability to change. Sometimes it does not take a great deal to make this happen. You hear something about someone that throws new light on your memory of them. Or it becomes clear that for some time you have been deceived in some way. You can then only watch as one memory after another is forced to adjust to the new version of your past. You want to protect precious memories from this effect. Best of all would be to store them away with a security code, as 'read only' files. But sometimes life adds memories that change something about the memories that were already there. Hungarian writer Péter Esterházy was harshly confronted with this in January 2000, when files released from the archives of the security services made clear to him that ever since childhood he had lived in a reality different from that he assumed he was in. In a book to which he gave the title *Revised Edition*, Esterházy describes how he was forced to give his beloved childhood memories a new and sometimes intensely embarrassing interpretation. This too is a form of forgetting – no longer having access to what memories used to mean for you.

Perhaps no technology has been deployed with such enthusiasm against forgetting as photography, yet none contains so many paradoxes in its relationship with memory. We like to photograph unforgettable moments, which suggests we are aware that even the unforgettable can be forgotten. Our hope is that photographs will underpin our memories, but sooner or later we notice that they are in fact starting to replace our memories, an effect that is particularly marked in the case of portraits. When a loved one dies, a photograph slides in front of our memories of them. Why do our brains not retain both the photograph and the memories? Photography has been called 'a mirror with a memory', but how much faith can we have in a memory prosthesis that makes us forget so much?

The determination not to forget becomes an intense desire where memories of deceased loved ones are concerned. We would like to cherish them in such a way as to preclude forgetting. That is the promise contained in letters of condolence. It is also an incantation, a promise to ourselves

about our own memories. Conversely, a person forced to depart this life hopes to live on in the memories of loved ones. Disappearing from those memories has been called a 'second death'. A collection of valedictory letters written in France in the time of the Terror (1793–94), by people who knew they would die the next day, demonstrates how human beings try to find comfort in the thought that those they love will never forget them.

The intractability of memory expresses itself in forgetting in two directions. There is no such thing as a forgetting technique. The Greeks bequeathed to us an *ars memoriae*, but no *ars oblivionis*, nothing we could use deliberately to forget something. Unfortunately we also lack the opposite facility: a safeguard against forgetting. What we forget or do not forget is up to our memories, not us. A technique for forgetting exists only in the form of thought experiments. In the film *Eternal Sunshine of the Spotless Mind* (2004), the main character turns to the advanced computers of a company called Lacuna to erase her memories of an unhappy love affair. The same thought experiment was carried out years earlier in a 1976 story by Marten Toonder called 'The Little Book of Forgetting', in which the author presents a succinct, wise philosophy of forgetting. The fact that in the story the technique is invented by a 'master of the dark arts' is an invitation to the reader to think hard about whether it would actually be sensible to have unhappy memories removed.

In this book we hear mainly from neurologists, psychiatrists, psychologists and other scientists of memory, but even if they could provide us with answers on the how and why of forgetting, there would still be an awkward distance between our theoretical knowledge of memory and what we ourselves experience. It is in that no man's land between science and introspection that questions arise that force us to think about our own remembering and forgetting. Between the ages of 55 and 60, Swiss writer Max Frisch occasionally included in his diary lists of penetrating questions.⁵ They helped to inspire the difficult questions about forgetting with which this book ends. Frisch did not answer any of the questions himself, setting an example that I have been more than happy to follow.

First Memories: Islands in the Stream of Forgetting

Years ago I watched the Tunisian film *Halfaouine*, originally released in 1990. I could not recount much of the story now, but I do remember a few fragments about a little boy called Noura. He is 12, still young enough to be allowed into the women's bath house with his mother. Every week he enters a wonderful steaming world, in which women surge into view out of the clouds of vapour, kneel down beside him, soap him, soap themselves, rinse and then slowly rub their arms, legs and breasts with oil. Noura feasts his eyes. He is beginning to reach the age of curiosity about women's bodies. His gaze is becoming a stare, although he puts on his most innocent face. Naturally he cannot get away with that for long. One of the women spots something in his look. Next time he needs a bath he has to go with the men.

The boundary between still young enough and too old is hazy, but it is certainly a boundary and once across it there is no way back. Just as Noura at the age of six had no idea how he would look at women when he was 12, so the Noura ejected from the women's bath house can no longer remember what it was like to be surrounded by warm, naked bodies without even noticing, seeing nothing when there was so much to see. His awakening sexuality has created two Nouras who are mutually impenetrable.

But is that impenetrability truly mutual? Surely your memory allows you to summon up your former self and experience the world as you once did? Some writers of autobiographies almost convince us it does. In their

opening chapters they evoke a child who sees the world through a child's eyes, thinks like a child and behaves like a child. Where could that child have come from if not from memory?

The question is naive. Children are not to be found in the memory; it is at best the place where they are engendered afresh. And even if memories are needed in order to get a child down on paper, they are not simply retrieved – they are dug up, often with great difficulty. They then need to be subjected to literary adaptation, since a collection of memories from childhood is not the same thing as the story of a childhood. Descriptions of childhood that are convincing, that seem authentic, that cause the reader's own childhood memories to resonate, are the product of literary craftsmanship and in that sense far removed from a child's experience. We are all at a distance from our own memories, but the writer of an autobiography is removed from them by that same distance squared, so to speak, because of the need to put those memories into words and arrange them into a narrative.

For the type of memory at issue here, psychologists invented a term in the 1980s: autobiographical memory. It has metaphorical associations that fit with ideas about autobiographies that emerged far earlier in literary theory. Philippe Lejeune wrote in 1975, 'Everyone carries with him a rough-draft account of his own life that is continually being revised.'¹ A quarter of a century of psychological research later, the conclusion reached is roughly the same. Our memories are more reconstructions than recapitulations of our experiences, and those reconstructions are influenced not only by who we once were but by who we have become, not just by the past but by the time in which memories are called to mind. And yes, that notebook is continually being adjusted, in the passive tense. We do not rewrite our memories ourselves, it is done for us, and if confronted with all those adaptations, when reading old diaries or letters, for example, we are astonished at what has been deleted or recast in the intervening years.

Or indeed added. In his autobiography *The Tongue Set Free* Elias Canetti writes about his earliest memory:

I come out of a door on the arm of a maid, the floor in front of me is red, and to the left a staircase goes down, equally red. Across from us, at the same height, a door opens, and a smiling man steps forth,

walking towards me in a friendly way. He steps right up close to me, halts, and says: 'Show me your tongue.' I stick out my tongue, he reaches into his pocket, pulls out a jackknife, opens it, and brings the blade all the way to my tongue. He says: 'Now we'll cut off his tongue.' I don't dare pull back my tongue, he comes closer and closer, the blade will touch me any second. In the last moment, he pulls back the knife, saying: 'Not today, tomorrow.' He snaps the knife shut again and puts it back in his pocket.²

Every morning that scene is repeated and every morning he is more fearful than the last, but he keeps all this to himself and only 10 years later does he ask his mother about it.

She could tell by the ubiquitous red that it was the guesthouse in Carlsbad, where she had spent the summer of 1907 with my father and me. To take care of the two-year-old baby, she had brought along a nanny from Bulgaria, a girl who wasn't even fifteen. Every morning at the crack of dawn, the girl went out holding the child on her arm; she spoke only Bulgarian, but got along fine in the lively town, and was always back punctually with the child. Once, she was seen on the street with an unknown young man, she couldn't say anything about him, a chance acquaintance. A few weeks later, it turned out that the young man lived in the room right across from us, on the other side of the corridor. At night, the girl sometimes went to his room quickly. My parents felt responsible for her and sent her back to Bulgaria immediately.³

Elias Canetti, born on 25 July 1905, turned two that summer. The red, the girl, the man and the knife are components of a very early first memory, since on average our earliest recollections date from somewhere between our third and fourth birthdays.⁴ In fact first memories of an event like this, featuring a progression through time, usually come from later still. But even if we take this passage to be as unadulterated an account as possible of what Canetti came upon as a first note in his memory, it contains elements that cannot have been experienced as he describes them by an infant who had just turned two and was largely devoid of language. The three sentences spoken to him by the man must have been

converted into language later. Every attempt to call experiences of childhood to mind relies upon instruments unavailable at the time. The fact that Canetti relates this memory in the first person and gives his explanation in the third person ('the two-year-old baby', 'the child'), suggests that a memory can be described independently of any explanation, as an original, pure experience. This is a bifurcation of perspective that does not exist in reality.

The Scheepmaker collection

The first notes in autobiographical memory are preceded and followed by empty pages. Although they mark the start of our existence as beings with memories, they also highlight the extent of the forgetfulness surrounding them. The first memory of Dutch author J. Bernlef is of looking through bars and shouting loudly 'Uilie, Uilie!'. His parents later explained to him that he must have been sitting in his playpen calling the German nursemaid, whose name was Uli. His next memory dates from a full three years later. The English author Frederick Forsyth was 18 months old when his parents left him in his pram for a moment, with the dog to guard him. Afraid of the dog, he climbed out, fell, and felt the animal licking his face. After that came a gap of a year and a half. The childhood memory resembles an engine that sputters briefly and then stalls.

These earliest memories of Bernlef and Forsyth can be found in a little book published in 1988 called *De eerste herinnering* (The First Memory).⁵ Over a period of six years, journalist Nico Scheepmaker asked everyone he came upon, whether privately or through his work, for their earliest memory. The result was a collection of 350 first memories. Scheepmaker had no scientific pretensions in compiling his collection. There are certain disadvantages to that – he did not always ask how old people were at the time, for example, so we can determine their approximate age in only 263 of the total – but certain advantages as well. He had not immersed himself in theories about childhood memory and he noted down the stories told to him without any commentary or adaptation. Over the past century, psychologists have put together several collections of earliest memories for research purposes, but they almost always rely on questionnaires given to students. The memories in the Scheepmaker collection are from people with extremely diverse jobs, backgrounds and ages. Its greatest

asset as a collection, however, is its size. Ask 10 people for their earliest memory and you will hear 10 stories; ask 350 and you will start to see patterns.

Forgetting is an integral part of every first memory, which often turns out not to be the earliest after all. Scheepmaker thought that his own memory of the still warm white bread he fetched from the bakery on holiday was his earliest memory, until his mother told him the family returned from that holiday early because of the death of his grandfather and he realised he also had memories of Grandpa. Publisher Geert van Oorschot sent Scheepmaker a letter describing a first memory that was even older than his previous first memory. Often people had three or four early memories that belonged together, from before moving house, for example, or featuring someone who died a short time later. The chronology was impossible to recall.

Sometimes people had even forgotten precisely where their first memories originated. Were they recounting something they had actually experienced, or was it a dream, or a story told in the family? The photograph that becomes a memory is notorious. A black-and-white snap is fleetingly glimpsed, and a few years later the memory has brought that frozen moment to life and turned it into a colourful recollection, rather in the way that some films begin with a still image in sepia that suddenly starts to move. Journalist Henk Hofland was for years convinced that his first memory was a dream. In the drainage channel behind their house in Rotterdam, the Dutch ocean liner the *Statendam* with its three funnels came steaming past. Eventually he described that dream to his father and was told it was not a dream at all. 'The *Statendam* did actually steam along there. Our neighbour was a model builder and he once made a replica of the *Statendam* and put it in the water at the back of our house. You didn't dream that, you saw it!'⁶ Some people really do have a dream as their first memory. In the case of lexicographer Piet Hagers it was a classic waking-up dream. He dreamed he was falling off the swing and woke on the floor next to his bed. Artist Peter Vos had a dream as his earliest memory as well. 'I dreamed about one of those Mondrian trees with branches that got all tangled up, which was very frightening.'⁷

In the Scheepmaker collection the child is on average three and a half at the time of the first memory, but there are outliers in both directions. Poet Neeltje Maria Min's first memory dates back to the liberation of the

Netherlands from German occupation. Her mother held her as they looked out of the window at people celebrating. She was nine months old. Poet Kees Stip told Scheepmaker that in 1913, during celebrations to commemorate the centenary of Dutch independence from Napoleonic France, he was only three months old when he saw from his cradle, which had salmon-coloured curtains, a triumphal arch in the neighbour's hedge. These are details that immediately raise the question of how reliable very early first memories are, a matter to which we will return. Scheepmaker's book records five early memories from before the age of one. By contrast, nine of the earliest memories are from after the child's seventh birthday. Even with half an hour to think about it, Björn Borg could not recollect anything that happened before he stood on the steps of his school in Stockholm as a seven-year-old. Bertrand Flury, a cognac merchant, was walking with his grandfather at the age of seven when he was unexpectedly smacked for carelessly using the familiar form of address, '*tu*', instead of the polite '*vous*'. Others could remember nothing beyond what they were given for their seventh or even eighth birthdays.

People who say that their earliest memory is from such a late stage are usually rather embarrassed and concerned about it, wondering whether they are normal. They introduce their memory by saying, 'It may sound crazy, but ...'. All we can say is that they are a statistical aberration but not alone; every study turns up such late first memories in people who are otherwise completely normal. Embarrassment about a late first memory is misplaced, as is the remarkable pride seen at the other end of the normal distribution, in people convinced they were only seven, four or two months old at the time. In the Scheepmaker collection they are represented by conductor Claudio Abbado ('I still remember the chaconne by Bach that my father played when I was two months old') and by Dutch writer Jan Wolkers, who said he recalled the floral-patterned fabric of the hood of the pram he lay in as a six-month-old baby.⁸ Anyone who starts talking about first memories with a fair-sized group of people will notice that a kind of competition emerges to see whose is earliest. Those who drop out of the running, with their memories of events from when they were three or four, listen with growing disbelief to stories about the things people remember from before their second or first birthdays, until even they are trumped by someone who can recall their own birth. Fortunately no sensible person expects a psychologist to settle the issue. The competition usually ends, incidentally, in discreet hilarity

when a lady of a certain age with long grey hair parted in the middle starts talking about what she recalls of a previous life.

More interesting is the connection between age and the type of first memory. In his introduction Scheepmaker mentions journalist Dieter Zimmer, who distinguished between three types of memory recalled by the 70 people he asked: images, scenes and episodes. The category 'image' denotes precisely that: a single image, a fragment, sometimes merely a fleeting sensory impression. A 'scene' involves rather more: the location, the surroundings, the other people present; this is a memory of a situation, although still short and fragmentary. With an 'episode' there is some kind of development, an incident, an event, and in some cases the child actually does something. The boundaries between the three are of course fluid, though it is easy to point to typical examples. In the Scheepmaker collection the image of a handful of chestnuts on a sheet of newspaper recalled by writer Harry Mulisch belongs in the first category, as does the earliest memory of poet Simon Vinkenoog: 'I lay on my back and watched the sun play on the ceiling.'⁹ Examples of scenes include that sudden slap for saying 'tu', being lifted onto someone's shoulders to watch a procession, or visiting the circus and suddenly seeing an elephant's foot close to you. An example of an episode is Greek tourist board director Sakis Ioannides's frightening memory of being bullied by his sisters:

I was lying in bed when they hit me on the head and pretended to be sawing my skull open. They pulled the straw out of my head (as they described it), saying that without that straw I'd no longer be able to stand upright. Then they started to bounce around on the bed so that I did indeed keep falling down and at the same time I was looking under the pillows to find out where the straw had got to. When I was finally crying loudly enough, they stuffed the straw back into my head and stopped bouncing, so I was able to stay on my feet again.¹⁰

In research that predates Scheepmaker's book – including Zimmer's study – early first memories often turn out to be images, while late memories are usually episodes. Scene-like first memories fall somewhere in between. Scheepmaker writes that he did not see those links in his own collection, and he points to the fragment of an image recalled by Borg from when he was seven. But if you arrange the 263 dated memories

according to the three categories and then look at ages, you see precisely that sequence. Images, which account for 17 per cent of all the datable first memories, are linked to an average age of two years and ten months, scenes (53 per cent) to an average of three years and two months, and episodes (30 per cent) to four years and three months. So the difference between images and scenes is only four months, but between scenes and episodes almost 13. The first memories from before the age of one are mostly images and they include no episodes. Of the nine first memories from after the child turned seven, Borg's is the only one that can really be described as an image; the others are predominantly episodes. This connection between the child's age and the type of memory must be even more pronounced than it appears from these statistics, since with memories that could be categorised as images, the age of the child was more often missing than with scenes and episodes, probably because when looking back to later childhood there are more milestones to go by, such as starting kindergarten or primary school.

Practically all Scheepmaker's 350 first memories are described as visual images. They include only 16 memories that have no visual elements, divided evenly among the other senses. The number is too few to serve as a basis for statistically reliable conclusions, but in this collection, taste sensations usually produced unpleasant memories – of a mouthful of sand, a horrible banana or the taste of coal – whereas smells were associated with feelings of intimacy. As a baby, author Monika van Paemel was laid in a basket of puppies. 'I can still sense the smell of the nest and feel the panting of those little puppy bodies.'¹¹ German writer Michael Ende remembered the odour of the neighbour's dog. 'Then I was under the table with the dachshund and we were fighting over a bone; I can recall the smell of that dachshund to this day. But the smell is mixed with the scent of bread rolls that our neighbours were warming on the fire. It's a smell that comes from when I was just two.'¹² The neighbours moved away when he was two and a half. Sounds, in those rare cases in which they penetrate the memory, can leave a powerful impression as well. Artist Jeroen Henneman remembers the children next door tying a dog to a tree in their garden. The neighbours also kept bees and the dog was attacked by a swarm. Henneman didn't see anything, since there was a hedge in the way, but he did hear the yowling of the dying dog. Journalist Marijn de Koning remembers the terrifying sound of the V-1s. But sounds

can also evoke a sense of familiarity and safety, as with the footfall on the stairs that could only be Mother. Touch sensations are preserved for a lifetime in the first memory of actress Liz Snoyink: a citrus press fell over and orange juice spilled onto her hands. Guitarist Julien Coco came from a family of 10 children: 'My mother was a big, sturdy Surinamer who was always in a hurry, with all those children, and in her haste she once thrust her nipple smack into my eye when she was trying to breastfeed me. Since then the sight of a woman's bare breast has always made me recoil . . .'.¹³

First memories that have to do with touch, taste, smell or sound date back on average to the age of two and a half, almost a year earlier than the average first memory. They have the unstructured, fragmentary character of other first memories laid down at that age; they fall into the category of images or scenes, and there are no episodes among them. Those early, non-visual memories are interesting for another reason. They cannot have been confused with photographs, and because memories of smells or tastes exist largely independently of language, their origins cannot lie in stories doing the rounds in the family. The smell of a recently unfolded tarpaulin, the feeling of juice being spilt over your hands and the taste of a mouthful of sand are impossible to describe. Michael Ende took this as evidence for the authenticity of his memory of the smell of the dachshund and the bread rolls.

After just three or four pages of Scheepmaker's book you start to notice the astonishing number of accidents great and small. Footballer Frank Rijkaard fell into the next door neighbour's tub of hot laundry water when he was three and was admitted to hospital. Taking a tumble and having to get your teeth fixed, walking backwards into a hot iron and burning your calf, being pursued by a German shepherd dog, falling overboard, toppling out of a window, almost drowning, getting a shard of glass embedded in a leg – dozens of such accidents are recorded as first memories.

Danger, too, real or imagined, can easily find its way into the memory. Runaway prams and pushchairs alone, with the terrified child still in them, account for at least 10 first memories in the book. Many others have to do with suddenly being alone: lost, stuck inside a cupboard, left in the attic with the trapdoor shut. Truman Capote recalled the maid taking him to the zoo in St Louis, then leaving him on the path and running away when someone shouted that two lions had escaped. Less spectacular, but a classic of Dutch first memories, is having your tonsils out.

The overrepresentation of fear-filled first memories, noticed as early as 1929 by Moscow educationalist Pavel Petrovich Blonsky, is reflected in an analysis of the emotions that accompany the memories in the Scheepmaker collection.¹⁴ In the case of 126 memories – one in three – an indication was given of the accompanying emotion. On average those first memories came from slightly later in childhood, at an age of three years and eight months. Image memories were distinctly underrepresented in this category, their place taken by episode memories. The distribution of positive and negative emotions was completely out of balance. In only 17 per cent of first memories did the child feel happy, proud or safe; in 83 per cent the memory was associated with a negative feeling, and in two out of three cases that feeling was fear: memories of a cap that blew off, a bottle of cough syrup spilled in a bed, watching a rabbit being skinned, unexpectedly being lifted onto a Belgian horse, fireworks, shooting in the distance, a nightmare, the first day at nursery school. The Scheepmaker collection includes a handful of frightening first memories of faces suddenly looming up over the pram – clearly something we should be cautious about. The two biggest categories after fear and shock are distress and anger.

Those emotions are sometimes attached to the first memory by the response of parents. For Neeltje Maria Min, being held by her mother as they watched people celebrating her country's liberation in 1945 was a fearful memory because she could feel that her mother did not entirely trust the situation, eventually taking a step back from the window. Children do not remember their own fear when fire breaks out, instead they recall their parents' panic. They have no recollection of grief when a brother died, but the weeping of adults has stayed with them. Actor Walter Crommelin failed to recognise his father, who had returned from the East Indies after two years away, and would have preferred to carry on playing. Later he remembered how upset his mother was by that. Children judge the world through their parents' eyes.

Roughly 50 first memories in the Scheepmaker collection have to do with the Second World War. You could almost describe the Dutch experience of that war in first memories alone. A man remembers going off to search for his father, who was billeted at a fort during mobilisation. Then there is the bombing of Schiphol airport, and of Middelburg, and later of Bezuidenhout and the Philips factories, then the raids on homes near the

Ypenburg airstrip, sheltering under a table during an air raid, a beating meted out to a Jewish road-mender, and the sight of Jews secretly sleeping in an attic or looking up anxiously from a cellar. A two-year-old Jewish girl guilelessly told passers-by her name and had to be moved without delay to a different hiding place. Another little girl felt astonished at hearing her mother lie when German soldiers asked whether her husband was home. Later comes a little boy stealing bread from near the V-2 launch pads, then the strips of silver paper dropped by allied aircraft to interfere with German radar, British bombers flying over and food drops, followed by the liberation (five of the first memories concern the arrival of Canadian troops), parents fumbling to hang out a Dutch flag, Germans marching away and finally, after the war, toy cars found in the ruins of bombed houses.

Scheepmaker does not mention how old his respondents were, so there is no way of knowing whether first memories featuring the war really are overrepresented in his collection, but given that those who mention it must have been born between 1937 and 1943, the figure of 50 memories for this window of six or seven years does seem high. Anyone focusing on the experiences laid down in those memories will find support for a relatively recent theory about the cause of all the forgetting that wipes away first memories.

Latecomers

The greatest puzzle of first memories is that so much comes before them. Life has been going on for quite some time before we start permanently recording events and impressions. 'We are latecomers in our own history,' wrote philosopher Cornelis Verhoeven.¹⁵ The paradox is that a young child's memory seems to be working perfectly well at the time. Two-year-olds know whose company they enjoy, or don't, so they welcome one person's visit and crawl away as soon as they spot someone else. They must surely recall previous experiences. Yet within a couple of years all those memories have disappeared without trace.

Elsewhere I have written at length about theories as to why autobiographical memories start so late and so falteringly, but it is worth recapitulating here and adding the results of new studies.¹⁶ Some researchers find an explanation for all that forgetting in the speed of neurological ripening. The weight of the brain at birth is about 350 grams. Adult brains weigh

between 1,200 and 1,400 grams. Most of this growth, almost an explosion, happens in the first year, when the brain's weight increases from 350 to 1,000 grams. The hippocampus, essential to the forming of memories, is underdeveloped in the early years of life and may well be incapable of sending records, as it were, to the neocortex, which is itself still under construction. The brain is delivered at birth in a rudimentary state, with most of the wiring yet to be done. No one could expect lasting memories to be formed in it. So the fact that young children 'forget' almost everything is often attributed to a failure of storage.

This theory of cerebral maturation would explain why autobiographical memory develops only at an age when the growth of the brain starts to stabilise a little, but it does not account for those huge differences (huge in relation to the duration of childhood, at any rate) in how far back we can remember. The ripening of the hippocampus and the brain in general happens within far narrower margins of individual variation than the age at which the first memory is laid down. Wiring that is missing or still being installed cannot entirely explain the phenomenon.

A more psychologically oriented theory seeks an explanation for forgetting in the absence of self-consciousness. Young children do not yet have an ego, a self that can integrate experiences into an account of an individual's history.¹⁷ As long as there is no ego, no autobiography can be compiled. There are only fragmentary events, not yet held together by an individual who experiences them all as components of a personal past. What we call forgetting is in fact the loss of memories that have never been recalled. Only a child who is starting to realise 'I'm experiencing this' will be able to lay down lasting memories.

Self-consciousness usually develops gradually, but some children experience it as a sudden insight, which in a few cases is actually the first memory. Writer Hans Magnus Enzensberger told Scheepmaker that when he was two he stood on his bed looking at the electric vans used by the parcel post and their hum gave him 'the feeling of knowing that I was myself'.¹⁸ Developmental psychologist Dolph Kohnstamm has collected several hundred 'I am I' memories of this kind and devoted a well-written book to them.¹⁹ He became fascinated by the subject after reading what Carl Jung wrote at the age of 84 about the 'awakening' of his own self-consciousness when he was 11: 'Suddenly for a single moment I had the overwhelming experience of having just emerged from a dense cloud. I

knew all at once: now I am *myself*! It was as if a wall of mist were at my back, and behind that wall there was not yet an “I”. But at this moment *I came upon myself*.²⁰ Such memories often have a clarity that resembles a camera flash. The child recalls where it was, who was there and what it was doing at that moment. This is a realisation that evokes emotions in the child, sometimes because it realises with a shock that it is unique, not interchangeable with anyone else, different from its brothers and sisters, the only ‘I’. Sometimes the child is aware above all that it is alone, closed off, a prisoner of its body, insignificant in the vastness of the world. Reactions can range from intense happiness to mild panic.

Most of the ‘I am I’ memories in Kohnstamm’s collection date from the age of about seven or eight, or even older, rarely arising at a younger age. So they are of a later date than first memories, but they do pinpoint the years when autobiographical memory starts to function fully. Although other memories precede them, that earlier period is sometimes described as ‘fog’ or as a darkness against which the ‘I am I’ memory stands out like a ‘brief crack of light’, as Vladimir Nabokov describes it. Beatrijs Ritsema was staying with her grandmother when she was

suddenly caught off guard by the thought ‘I am I’. What was so remarkable was that I immediately realised it was the first time in my life I’d thought that. As if all the time before then I hadn’t really existed. It was a moment of great clarity. I no longer coincided with myself but was looking at myself from above, as it were. Just the fact that I could think ‘I’ about myself was new and strange.²¹

The arrival of a conscious self seems to close off something else.

The development of self-consciousness, whether sudden or gradual, is not the only change in this phase of life. As they develop a vocabulary and linguistic skills, children start to process and store away their memories in the form of language. Their recollections gradually become stories and the revival of them relies from then on mainly on verbal associations.²² It is surely no coincidence that most people can trace the first memories they are able to recount to somewhere between their third and fourth birthdays, a time that coincides with the rapid development of linguistic skills. After that we quickly lose sight of memories that are not stored in language; they come to lie beyond the reach of verbal associations.