

INSIDE MY MIND: CHAMPIONSHIP ROUNDS

The World Memory Championships, which first appeared in 1991, was the brainchild of Tony Buzan (the inventor of Mind Maps®) and Raymond Keene OBE, a chess grandmaster. They believed that people need to exercise their minds in just the same way that they exercise their bodies, and – just as we compete internationally at physical sport – what better way to advance this purpose than to have an international competition that pits the world's greatest mental athletes against one another. I've been involved in the Championships since the beginning as both a competitor and an organizer. In the latter capacity, I have helped to refine the ten rounds that make up the competition, so that they are fair for everyone who competes. The rounds of the Championships are:

*Abstract Images • Binary Numbers • One-hour Numbers
• Names and Faces • Speed Numbers • Historic and Future Dates • One-hour Cards • Random Words • Spoken Number • Speed Cards*

I enjoy all the disciplines, but my favourite is the One-hour Cards because it's a real test of stamina – memorizing 24 decks in an hour really puts me through my paces! The Spoken Number is probably the most gruelling, as it's "sudden death". Although I might attempt to recall 300 digits at the rate of one per second, if haste makes me forget, say, the third digit, my score is just two – which makes this round a test of my nerve, my concentration, and my ability to close my mind to distractions.

So how could I do this? Clearly, I had to squeeze more numbers into each single stage of the journey. If I could somehow double the number of digits at each stage, I would

also potentially double the number of single digits I could memorize in an hour. The wonderful thing was that I had the solution to this problem already embedded within the system I was using.

Remember how each character has an action, feature or prop to give him or her some personality? I realized that if I coded the first pair of numbers in the sequence as a character and the second pair as only a prop, feature or action, I could combine the character of the first pair with the prop, feature or action of the second pair, then place that combination of character and, say, action at the first stage of the journey. Then, the third pair (the fifth and sixth numbers) would again be coded as a character and the fourth pair (the seventh and eighth numbers) as a prop and that combination would be placed at the second stage in the journey; and so on. The result was that I would have linked each stage of the journey to four numbers in the sequence.

For example, if I wanted to memorize the number 15562053, I would need to use only two stages in my journey. The first pair of digits (15) gives me AE, or Albert Einstein. The second pair gives me ES, or Edward Scissorhands. So, to memorize the first four digits of this sequence, at the first stop on my journey I imagine Albert Einstein cutting hair – the hair-cutting is Edward Scissorhands' action. Edward doesn't himself appear – instead, Albert Einstein becomes the surrogate for the action that, in the original system, embedded him in my mind. The third pair of digits (20) gives me BO, which for me is Barack Obama (this is one character I've recently updated). The final pair (53) becomes EC, or Eric Clapton, whose action is playing guitar. So, to memorize these four digits, I imagine Barack Obama playing guitar and I place that image at the second stage in my journey. (As a matter of interest, if you reversed the two pairs of digits to give 5320, you'd have Eric Clapton waving a US flag. The system obviously works with any permutation of numbers.)

These characters plus their surrogate props, features or

actions are what I call complex images. They are, effectively, interchangeable pieces of a mental jigsaw puzzle, which can be mixed and matched in 10,000 different ways to enable me to memorize vast sequences of numbers in the shortest time possible.

I believe the effort that I put into devising this system kept me ahead of the rest of the competition in the early days – I don't believe that any of my initial rivals had found a system that enabled them so efficiently to memorize four digits at once. Now, however, the story is quite different – competitors these days are becoming more and more adept at number memorization, which means that I'm always looking to make improvements to my system. If nothing else, this certainly keeps me on my toes!

CHAPTER SEVENTEEN

BECOMING CARDS SHARP: MULTIPLE DECKS

My work with numbers, and specifically creating complex images ([pp.96–9](#)), led the way for me to further hone my skills at memorizing cards. When I started doing this, I was trying to beat Creighton Carvello's record for a single deck. As I mentioned earlier, I soon realized that I had within my grasp the ability to memorize multiple decks. Later on, I realized that I could make that goal more realistic if I could translate the method I was using to memorize long sequences of numbers into an approach or strategy I could use for multiple decks of cards.

You already know the basics of memorizing playing cards (see [pp.43–62](#)). I always encourage people to learn a new skill by taking things one step at a time to prevent failure. So, I suggest you feel really confident with placing one card at one stop on a journey *and* with the Dominic System before you try the technique in this chapter. To make this new variation easier once you do begin, though, I've broken it down into small steps so that you have a run of successes – rather than trying to do too much too soon and becoming frustrated. I want you to experiment with a few cards to begin with, just to satisfy yourself that the principle works. If you're successful with a handful of playing cards, this will give you the impetus and the confidence to use it to try to memorize more, and then eventually a whole deck and even perhaps more than one deck.

First steps

You'll need a deck of cards. The first thing you must do

with it is pull out the court cards (the Jacks, Queens and Kings) and then arrange them according to suit (Clubs, Diamonds, Hearts and Spades).

Now it's time to bring into play some of the principles you've already learned. At the beginning of the book I said that I associate every card in the deck with a character, and that some of the characters come to me in a flash. Well, one logical way in which I assign characters is to ensure that the suit itself, linked with the value of the specific card, provides a clear and logical connection to the character. Try it. Perhaps the Queen of Diamonds is Queen Elizabeth II of England; and the Queen of Hearts, your wife or girlfriend (or the King of Hearts, your husband or boyfriend). In other words, Diamonds might give characters who are wealthy, while Hearts could be those you love or admire.

Having assigned your characters, you need to integrate one of the elements of the Dominic System. Each of your characters needs a prop, feature or action. So, for example, if Bill Gates is your King of Diamonds, picture him counting bundles of cash or sitting at his laptop checking his latest bank statement. The prop, feature or action animates your characters. In time, it will also help you to memorize longer lists of cards, because you can turn each card into a complex image, just as I do with the long sequences of numbers.

Place the pile of court cards face down in front of you. One by one, turn over each court card. Each time you turn up a new card, look at it, make a character association, give the character an action, and turn the next card. Keep doing this until all the court cards have a character and action and then review the choices you've made, altering them as necessary, until you're happy with the associations and they're firmly embedded in your memory.

Once the cast list for your court cards comes naturally to you, you're ready to shuffle them (still keeping them separate from the rest of the deck) and then memorize them in the new random order. You'll need a 12-stage journey

for this. Use one from your journey bank, or invent a new journey. As I've said before, I have journeys that I keep for memorizing cards and numbers (while others work better for names and faces and words; see [p.73](#)).

Run through your route a couple of times to familiarize yourself with the stops. Place the pile of shuffled court cards face down in front of you. Turn over the first card. With good preparation, you should instantly recognize it as the character you've given it, and all you need to do is to place that character, including his or her prop, feature or action, at the first stop on your journey.

Let's say the first card you turn over is the King of Hearts and you've given that card the character of your father, and let's say he's a keen tennis player (which gives him his action). If the first stage of your journey is your front gate, you would imagine your dad at your gate practising his serve – perhaps he's serving over the gate into the road, and you flinch as he narrowly misses the cars! If the next card is the Queen of Diamonds and you've given her the character of Queen Elizabeth II (with the action of knighting someone), you would place her at the second stop in your journey (perhaps your front door). She's motioning to you to kneel as you approach her so that she can knight you.

Spend as long as you need walking through your journey and placing the 12 court cards at the 12 stops. Your aim is to accustom your mind to the conversion process, while also allowing your imagination free rein to bring the cards to life. Your brain is having to do several things at once – see a card, convert it to a character, place the character in the journey, and memorize it. Remember to use emotion and all your senses and to try to make the connections logical so that you aren't asking your brain to work harder than it needs to. Go through the whole 12-card stack again, if you like, and then once you think you have it memorized, review it in your mind without looking at the cards. Then, again without looking at the cards, write down the sequence of cards.

How did you do? Don't be hard on yourself if you made a few mistakes – although do try to work out where you went wrong. If some of the associations weren't strong enough, perhaps it would be better to substitute other characters or actions for those cards. Remember, practice makes perfect – so shuffle the deck and do the whole exercise again until you make no errors at all.

Extending the memorization

Once you've mastered the 12 court cards, it's showtime! You can now move toward memorizing a complete deck of 52. First, you need to lay the groundwork. Just as you gave a character to each of the court cards, you need to attach a character and a prop, feature or action to the remaining 40 cards in the deck. It sounds laborious, but once it's done, and you use your cast list to memorize cards as they are turned over, you'll have one of the greatest practice tools for your memory at your fingertips.

Coding your cards

If you managed to code the 100 permutations of digits for the Dominic System (see [p.92](#)), coding your 40 remaining cards will seem like child's play. Begin by picking out cards that somehow remind you of someone. Perhaps the Ace of Spades is your boss, or a teacher you particularly admired. One of my students uses a whole British pop group – S Club 7 – for the 7 Clubs! I like to use James Bond for the 7 Diamonds – he is agent number 007 and he was the starring character in the movie *Diamonds are Forever*. Once you've been through the remaining 40 cards, finding those with specific character significance, you can code the rest of the cards using a slight adaptation of the Dominic System.

The Dominic System for playing cards

Instead of coding pairs of numbers into pairs of letters that then translate to names, you can use the Dominic System to translate the card value into one letter and then use the initial letter of the suit to give the second letter. For example, the 2 Spades becomes B (2) S (Spades) and the 8 Hearts becomes HH. Unless you've already given specific associations unrelated to the Dominic System, the Ace of any suit takes A and the ten of any suit takes O. Turn through the remaining cards in the deck, working out the letter pairs. Make a list on a sheet of paper (just as you did for the numbers), writing the pairs of letters down the left-hand column. In the next column spell out the character name for each card. For me BS translates to Bram Stoker (the author of *Dracula*), while HH is the wrestler Hulk Hogan, but could equally well be Harry Houdini or Hermann Hesse. Of course, you don't always have to use famous people – if you know someone called Helen Harris, she would work, too. In the next column give each character an action, feature or prop, just as you did on [page 94](#).

Learning your codes

The temptation once you've spent lots of time working out your characters is to set about learning them all straightaway. However, you want to make the codes you've formed stick, so I suggest you adopt a slow, careful learning process that enables you to embed the codes firmly in your mind. Aim to learn ten cards and their characters and actions every day for four days (you already know the 12 court cards). On the fifth day, review the lot – from memory if you can – simply by turning over the cards one at a time and saying to yourself that character's name and prop, feature or action. Include the court cards in your review process, too.

If you like, you can adopt a more formalized approach and review according to the principles of the Rule of Five.

Every day learn your ten new characters, but also every day make a review of those characters and any you've learned on previous days (again, including the court cards). In this way, by the time you come to your full review on day five, all the characters should be making their way into your long-term memory. If you can do more reviews than this (perhaps in the morning and evening, each day), all the better. Once you're confident that you know your cards inside out, you're ready to do the exercise on the opposite page. Try it, and be confident with it, before you move on to the advanced system for card memorization described below.

EXERCISE 8: A Deck of Cards

It's hugely important for your self-confidence to have lots of small successes that build up to one big success. So, in this exercise, you're going to use the basic system to memorize half a deck of cards. Only once you're confident should you try the full deck.

- 1 Choose a journey of 26 stages that you're completely familiar with – you don't want to have to work to recall the stages when you're trying to memorize the cards. Once your route is ready, count out 26 of the 52 cards (half the deck) and shuffle them, then place them face down in front of you. Turn over the top card and put it down next to the stack. Connect that card's character and prop, feature or action with the first stop on your journey. When you're ready, turn up the next card, and connect that one to the second stage. Continue turning and mentally placing cards until you've revealed all the cards in the stack.
- 2 Do a mental review of the journey. The system should allow for good retention, so you shouldn't need to

review before you've memorized all 26 cards. As you review, don't refer back to the cards themselves: simply walk through your journey, recalling each card to yourself. Then, for your "official" recall, write down each card in sequence on a sheet of paper. Refer back to the deck of 26 cards to assess how well you did. A score of 10–16 cards in order is very good; 17 or more is excellent. Once you can confidently memorize all 26, try step 3.

- 3 Now repeat the memorization in steps 1 and 2, but for the whole deck (for this you'll need a route of 52 stages). Once you're confident at that, you can try the advanced system (see opposite).

Advanced card memorization

To memorize four digits at a time, you used "complex images" – you combined one character with the prop, feature or action of another (see [pp.96–9](#)). You can use the same principle for memorizing cards, and then you need only a 26-stage journey to memorize a whole deck; which means that you can use your 52-stage journey for two decks. This is how it works.

Imagine that the first two cards you turned up in the deck were the 6 Clubs (SC) and the 5 Spades (ES). Let's say that your character for SC is Simon Cowell and his action is pressing the buzzer to register his displeasure at an act on one of his talent shows; while ES gives you the former boxer and famous US talk-show host Ed Sullivan, whose action (naturally) is boxing. At the first stage of the journey, instead of just placing Simon Cowell with his own action (which would represent one card), you'd place Simon Cowell boxing, in this way combining the two cards at one stage.

For example, let's say the first stage of your journey is your front door. You might imagine Simon Cowell in boxing gloves pummelling the closed door as if trying to punch his way in. If you pair up the remaining cards in the deck in the same way and place each pair at a stage on your journey, you'll need only 26 stages to memorize all 52 cards.

Playing card games

Once I'd developed my advanced system and become proficient at it so that I could memorize multiple decks of cards with relative ease, I could not only win memory competitions and amaze audiences, I also became a card sharp. For a while I made a living playing the casino game blackjack – I used my powerful memory to gain an edge over the casinos, gambled accordingly, and won good money. Unsurprisingly, I was also eventually banned from casinos on both sides of the Atlantic!

Of course, not everyone will want to hone their card-memorizing skills to become a professional blackjack player, but the system is just as applicable to household games such as whist or bridge. In whist, for example, four players are each dealt 13 cards from a shuffled deck. The object of the game is to win tricks: the highest trump laid in a round wins the trick; or if no player lays a trump, the highest card of the leading suit takes the trick. Let's say you want to memorize the following typical round of cards played in a four-handed game. The four players (column 1, below) lay the following cards (column 2). The third and fourth columns represent my character codes for those cards.

PLAYER 1 3 Clubs CC Charlie Chaplin

PLAYER 2 4 Clubs DC David Copperfield

PLAYER 3 8 Clubs HC Hillary Clinton

PLAYER 4 Ace Clubs AC Al Capone

There are a number of ways to approach how you memorize the round, depending on the level of help you feel you need.

First, if you just want to know that these cards have left the deck, try imagining throwing a bucket of water over each of the card characters. I imagine the reaction of each person as they receive a good drenching. Charlie Chaplin's sad face; a rueful expression from David Copperfield; Hillary Clinton shocked and dismayed; and Al Capone giving me an angry, threatening look! Once you have "seen" these actions in your mind, you'll be able to work out whether or not a certain card is still to play, simply by recalling whether or not that character has had a drenching yet.

A more precise method is to use a prepared 26-stage route to memorize the sequence as the cards are played. Using the system of complex images to memorize two cards at a time (one as a character, the other as a prop, feature or action), at the first stage of the journey I picture Charlie Chaplin pulling a rabbit out of a hat (Chaplin is using the action of the magician David Copperfield). At the second stage, I picture Hillary Clinton spraying bullets from a machine gun (Al Capone's action). Once the second round is played, I place that set of four cards at the next two stages of my journey, and so on until all the cards have been played.

Finally, if you feel really confident with the system, you could allocate one journey for each player and memorize which cards have been played by each person. You need four routes of 13 stages. Player 1, to your left, could be a route around a park, player 2's route could be through a shopping mall, and so on. When player 1 lays down the 3 Clubs, you picture Charlie Chaplin at, say, the park gate (the first stage); when player 2 plays the 4 Clubs, you imagine David Copperfield doing magic at the entrance of the shopping mall; and so on.

CHAPTER EIGHTEEN

GETTING UP TO SPEED

The thing about memorizing cards and making it a practical skill to use in card games and in casinos is that you need to be fast. It's not possible for me to teach you speed itself – the more you practise, the faster you'll get – but I can let you in on the secret of how I make my memorizations as fast and efficient as possible.

The simplest way for me to illustrate how I optimize the time I spend is to describe to you exactly how and what I'm thinking as I memorize the first six cards from a shuffled deck.

First, my journey: in my mind's eye I'm standing in the travel agent in Guildford, Surrey. There's no one in the room, but I'm aware of my surroundings – there are holiday advertisements posted on the walls and there's noise from the street outside.

In the real world, I deal two cards in quick succession: the Ace of Diamonds and 7 Clubs. Immediately, I get a vague image of the actor John Cleese, my Ace of Diamonds (the card metamorphosed from Anne Diamond, a newsreader, to Cleese who sat at a desk and said "And now for something completely different"), sitting in a jacuzzi, which is the prop for the 7 Clubs (the 7 Clubs was an immediate association I made for my friend Paul in a jacuzzi). I make a fleeting mental note of my response to this bizarre scene – I think this could be a typical sketch from an episode of *Monty Python*. In a split second I note that this is a logical fit (Cleese was one of the *Monty Python* team) and move on to the next stage.

INSIDE MY MIND: BREAKING THE SPEED LIMIT

You'll probably find that when you start to get proficient at card memorization, you'll get faster and faster and then hit a barrier – usually at around five or six minutes per deck. How do you break through it? Years ago a competitor told me that she couldn't break her four-minute barrier: I asked her how many mistakes she was making and she told me that every deck she memorized, she recalled perfectly. That was her problem. As strange as it may sound, when I memorize a deck of cards at speed, I will usually make five or six errors. Why don't I strive for perfection? If I don't make any errors, how can I work out at what point I reach my capacity for memorization at the fastest possible speed? By always making one or two errors, I push myself against my boundaries. However, I do need to know what the boundaries are so that, during a competition, I can slow down my time to a pace that I know will mean I won't incur any penalty points.

Perhaps you're thinking that this contradicts my advice to take a zero-failure approach to card memorization. I suppose it does, but when you start out on your memory training, the most important thing to gain is confidence – to believe that you can do it, just as I learned to believe. Once I had that self-belief, I could start to take risks, push the boundaries and stretch my mind and my memory to the very limits of its capabilities – and if that meant making one or two errors along the way, well, I had the confidence to not let that stand in my way on the path to championship success.

I turn another two cards over in quick succession: 6 Spades and Ace of Hearts. Standing at the level crossing I see my wife (the six reminds me of “sexy” and her former

name was Smith, which gave me the S for Spades) injecting herself with a drug (my character for the Ace of Hearts is a friend who had something of a misspent youth). I get a momentary sense of shock at this thought – a good sign that I'll recall the scene later.

I turn over two more cards: Jack of Hearts and 10 Spades. Looking through the window of a clothes shop, I see my uncle (who looks like the Jack of Hearts) riding an elephant (irregularly, the 10 Spades is one of two animals in my list of characters – the other being my dog – but you might want to use the Dominic System in which 10 Spades gives you the initials OS). I sense my uncle's embarrassment at sitting on the elephant in a clothes shop.

And, then that's it – first six cards done. How long did it take me? About four seconds!

People assume that I must have a unique talent for visualizing pictures in detail and at great speed. However, as I mentioned earlier, I'm not aware of any great detail in my mind's eye. I don't need a faithful photographic image to recall my card characters. In many ways, it's the emotional responses that I make to the general impression of the scene that are important. When it comes to the recall phase, I do have a sort of distorted picture of the scenes I created during the memorization, but it's the emotional footprint that plays a crucial role in how well I can memorize and recall the sequence of the cards.

Our emotions tend to be instant: they are often knee-jerk reactions to what we see. And they are powerful. It's quicker and more effective to imagine a scene and monitor my emotional response to it, and then afterwards to recapture that emotional response as my memory trigger, than to fill in every last detail of how the image might look in reality.

This may seem to contradict everything I've told you so far about being creative and using your imagination and all your senses. What I've just described is my thought process as I'm memorizing cards at speed. However, when I started

out, I liked to exaggerate images and make them as funny, or sad, or even violent as I could to make the information stick. This was certainly useful at first, but in time, with more and more practice and as I've become increasingly proficient, I haven't needed to use precise detail or exaggeration, because creating the journeys, to me, is now more like an alternative real life.

After a while you, too, will rely less on detail, and instead exploit emotional responses. Your journeys will gradually change from being fantastic, slapstick cartoons to more surreal series of episodes with strong emotional connections. But it takes dedication and effort to get to this point – you have to keep practising. Card memorization is one of the best exercises you can give your memory – so the practice itself has enormous value for everyday life. With regular practice (say, once a day for a month), you may even be able to memorize a full deck in close to five minutes. And if you can make it in less than 60 seconds, I could be seeing you at the next World Memory Championships!

CHAPTER NINETEEN

DECODING THE BRAIN: FROM TECHNIQUES TO TECHNOLOGY

I've taught you my main methods for memorization. Now I want to tell you about another way that I train my brain. It all started in 1997 when I was asked to take part in a series of experiments that would measure my brain's activity as I was memorizing. By connecting me to an EEG (electroencephalogram) machine to measure the electrical activity in my brain, the researchers worked at finding out how that activity behaved across the hemispheres, as information passed between them via the corpus callosum, the superhighway that connects the brain's two halves. Researchers looked at both the balance of electrical power between the hemispheres of my brain and the range of brainwave frequencies I produced, according to whether I was memorizing playing cards in their random order or trying to recall them.

Seeing my brainwave activity on a computer screen in real time opened up a whole new world for me – finally, having taught myself techniques that enabled me to undertake great feats of memorization, I had an insight into what was actually going on inside my brain as I was doing this. I had expected that the balance of power would firmly reside in my right hemisphere, but, in fact, the results held a surprise for me. It turned out that each hemisphere produced almost exactly the same overall level of electrical power, or microvolts – neither hemisphere appeared to be more dominant over the other during memorization or recall.

Then, I noticed the frequencies – or speed – at which my brainwaves had been firing. The main brainwave frequencies we produce are:

- Beta waves: These are fast frequencies and represent the brain's normal alert activity. They are vital for taking action, decision making and concentration. Beta frequencies range from 13 to 40 Hertz. With such a broad frequency spectrum, beta waves are often subdivided into high beta and low beta. It's worth mentioning that high beta waves (24 to 40 Hertz) can be associated with stress. In short bursts, frantic brain activity is good for quick thinking and instant reaction, but prolonged high-beta activity is draining and can lead to burn-out.
- Alpha waves: These are slower – they are the “chill out” frequencies that we generate when we’re relaxed, and they are the best waves for undertaking creative visualization. They range from 9 to 12 Hertz.
- Theta waves: I think these are the most fascinating brainwave frequencies. Commonly referred to as the brainwaves of the twilight state, theta waves are associated with dreaming and REM (Rapid Eye Movement) sleep, when many researchers believe our memories are consolidated. During wakefulness, our theta waves promote creative thinking and logical thinking, both of which are important for improving memory. They range from 5 to 8 Hertz.
- Delta waves: These brainwaves are the slowest we experience and are associated with deep sleep and deep physical relaxation. They range in frequency from 1 to 4 Hertz.

As I committed the sequence of 52 cards to memory, I produced the full range of brainwave frequencies from slow delta to fast beta. However, the frequencies were dominated by alpha and theta waves, so I was clearly feeling relaxed – and also creative, which is in line with the

process of memorization that I'd devised. During recall, the theta waves became more dominant, indicating that I'd turned up the waves most associated with recall.

I was so impressed and intrigued by what I'd learned that I went out and bought my own equipment. I measure not only my own brainwaves, but those of clients, friends and family, all the time gaining insight into what's going on inside their powerful minds.

Analyzing the results

I've now spent more than a decade analyzing the EEG readings of all sorts of people – from those who claim to have a good memory to those who say they don't; young and old; working and retired. Although everyone's brain is unique, I have noticed that in a relatively small percentage of individuals, who have a happy, healthy lifestyle and a noticeably efficient memory, there is a certain pattern of brainwave activity that generally occurs. From concert pianists to CEOs and TV producers to full-time mothers, these individuals have three features in common:

INSIDE MY MIND: TECHNOLOGY AND MY TRAINING

Training for a memory championship is a full-time job for the two or three months before the competition takes place. Along with sorting out my physical well-being (see pp.180–81), I have to get my brain into shape. I take measurements on the EEG (see p.114) and AVS (see pp.119–20) machines that I have at home to make sure the two sides of my brain are communicating well with one another.

The World Memory Championships comprises ten disciplines (see p.97). I practise all these again and again, on a rota, until I'm confident of both my methods and my speed. Typically, I memorize around 600 numbers using three routes of 50 stages, accommodating four digits at each stage, using complex images (see pp.96–9). I have a simple computer program that flashes six binary digits per second on a screen, and I practise memorizing 300 digits, in sequence, in 50 seconds. I also use computer software that recites a 300-digit number at the rate of one digit per second. These are great ways to condition my brain for long periods of intense concentration, while providing essential practice for the Spoken Number discipline. Another computer program randomly selects 300 words from an electronic dictionary, which I try to memorize in 15 minutes, while another generates year dates and random nouns so that I can practise making links between dates and events (during the competition itself, I distil each event description into a key noun). Yet another generates abstract images for me to practise with. Social networking sites, such as Facebook, provide me with practice matching names to faces (I aim for 100 names and faces in 15 minutes).

- 1 Most importantly, they have very good balance in terms of amplitude or power across both hemispheres of their brain.
- 2 They have mobility through the range of frequencies from beta to delta (that is, they can switch frequencies easily). This is essential for optimizing brain power, in the same way that changing gears is essential for optimizing a car's engine power.
- 3 They can produce high-powered alpha waves – at 10 Hertz – which shows a good ability to relax and receive information.

Working with the data

So what does knowing all this mean in practice? If you can learn to align your brain to the best frequencies for memorization, you will automatically increase the power of your memory. Two methods by which you can do this using technology are neurofeedback and Audio Visual Stimulation. However, the great news is that I believe (although I haven't made empirical studies of this) that non-machine techniques, such as the memory training ideas in this book, are no less valuable for training your brain to access the best brain frequencies for memorization. In other words, although they might take a bit longer and require more dedication, "manual" techniques can, I believe, be just as effective as the training that I'm doing using a machine. As a matter of interest, though, here's how the machines do the job quickly.

Neurofeedback – look no hands!

Ever wanted to play a computer game using just the power of your brain? It sounds futuristic and even out of this world, doesn't it? But it's perfectly possible. Let's say you're stressed out and producing far too many high-end beta

waves (see p.115). You're becoming absent-minded and forgetful. To fix this, you hook yourself up to a neurofeedback system and play a game that requires you to produce slower alpha and theta waves in order to succeed. You might have to move a ball through a maze, but the ball will move only when your beta waves reduce and alpha activity increases, encouraging you to relax your mind. After several sessions of conscious mental relaxation, your brain learns to shift down a gear on its own and your memory starts to perform more efficiently.

Audio Visual Stimulation – Rose-tinted memory specs

Another way to influence your brainwaves is to use Audio Visual Stimulation (AVS). Sitting in a chair, you wear a pair of glasses with in-built light-emitting diodes (LEDs). The lights can be set to flash at a frequency that matches any desired brainwave pattern, which your brain then tunes into. This is called Frequency Following Response. For example, if you want to train your brain to easily access the alpha state, you would then set the program to a 10-Hertz frequency. Then, you close your eyes and sit back and allow your brainwaves to tune in to the flashing lights for about 20 minutes. AVS is an extremely powerful, non-invasive, non-addictive tool for resetting your brain to good working order – I wish every household could have one!

INSIDE MY MIND: REVERSING THE BRAIN DRAIN

I wouldn't be without my EEG and AVS machines. Although it might sound like something from a Gothic horror novel, realigning my brain with these machines is fundamental to my training. When I attempt feats of memorization, I need to be relaxed, but focused. The predominant brainwave frequencies that I need to produce should range between slower theta waves of 5 to 8 Hertz and faster low-end beta waves of 13 to 14 Hertz. If the ratio of beta to theta is less than 3:2, I'm showing signs of stress (this is the number-one common denominator in people I see who say they have a poor memory), in which case I take steps to remove stress from my life (see [p.183](#)), including using the AVS.

My AVS unit helps me to fine-tune and balance the electrical activity of my brain. I can set a frequency pattern to either speed up my brain if I'm feeling too dreamy or slow it down if I'm feeling stressed. My brainwaves follow the flashing patterns and learn to produce similar frequencies of their own. As the lights stimulate the billions of neurons in my brain to "dance to the same tune", I get a complete sense of relaxation. Afterwards, I feel centred, the world appears in sharper focus and colours seem brighter. Measurements of my brain activity show that the overall power of my brain in microvolts increases after these sessions. But the most important benefit is that my stress levels fall and I can think more clearly. Interestingly, the degree to which I notice any of these changes depends on how poor my well-being is at that particular time. If I'm already in good shape physically and feeling relaxed, I really don't feel the benefits of the AVS.

CHAPTER TWENTY

THE FIRST WORLD MEMORY CHAMPIONSHIPS

Once I had all my techniques sorted and I started breaking records for memorization, I realized that I needed a new challenge. I had an idea about holding a memory competition that would pit the world's best memorizers against one another. We were already trying to outdo each other for entries in the *Guinness World Records* book every year, so it seemed a natural step to make the competition upfront and official and put us all under one roof to battle for recall supremacy. I knew of a handful of people around the world who were capable of memorizing cards and long sequences of numbers, who I knew would be up to the challenge, but I had one problem. In the interests of fair play, I couldn't devise the competition *and* enter myself – especially if there were even a small chance that I could win.

Before I did any more than muse on the idea, fate was to play its hand. In 1991, I received a letter from chess grandmaster Raymond Keene about an event planned for later the same year. This is what it said:

*"Dear Mr O'Brien,
Creighton Carvello suggested that you might be interested in the 1st Memoriad, which we are organizing. I enclose details, and I do hope you will attend. I have, by the way, seen mention of your exploits in the bridge column in The Times, where I also write the chess column.
Looking forward to hearing from you,
Best Wishes*

I couldn't believe the timing. I felt as though I had spent the previous three years training for such a competition and here it was, handed to me on a plate.

Raymond Keene, with Tony Buzan (who created Mind Maps®; see [pp.142–4](#)), had come up with the concept of a Memory Championships and they were now ready to launch this upon the world. The first time I met the two of them, they quizzed me about my techniques and how I'd got involved. When I told them how I performed my memorizations, Tony turned to Raymond with an expression on his face as if to say, "He knows the secrets."

These two co-founders spoke to a number of potential competitors, listened to our recommendations, and made a note of our various memory strengths. Using all this information, they put together the first ever World Memory Championships, which they called the "Memoriad". A mere month later, I and six others (Tony Buzan called us "The Magnificent Seven") competed for the title of first ever World Memory Champion at London's Athenaeum Club.

Dressed in a tuxedo and as prepared as I could be for the one-day event, when I arrived at the club I think I felt most nervous about meeting Creighton Carvello, my inspiration, for the first time. When we did meet (and he was charming), the first thing I noticed about him was that his black shoes were so well polished, I could almost see my reflection in them. If his performance was going to be as polished as his shoes, I stood no hope at all!

The competition between us all was fierce, but with grave determination I clinched the title in the last discipline – memorizing at speed a single deck of shuffled cards. In what seemed a fitting end to three years of hard brain training, I beat Creighton Carvello's record for a single deck by a satisfying 30 seconds: I did it in 2 minutes 29 seconds, with no errors.

Two decades of championships later, the rules and

individual disciplines have been honed and refined to accommodate the suggestions of first-class memorizers from all over the world. You've already learned how to do most of the disciplines in the process of learning how to supercharge your memory power, notably the rounds relating to numbers and playing cards, but also by extension the random words round – all of which you could attempt with the techniques I've taught you so far. It's really heartwarming to me that I can claim responsibility for suggesting two of the other events in the competition: 15-minute memorization of abstract images (more of these later), and the discipline that I want to teach you next, the 30-minute memorization of random binary digits, which I believe to be a supreme training routine for your brain.

CHAPTER TWENTY-ONE

CHAMPIONSHIP PRACTICE: BINARY DIGITS

The first ever World Memory Championships was enormously well received, by both the competitors and the media. For the following year, we knew that the competition had to be bigger and better and stretch the memorizers even further. I suggested to the organizers that memorizing binary digits would be a great test of an individual's memory power and ingenuity. Binary digits also make a great exercise for anyone who wants to learn to boost their memory power.

Binary code is the language by which all computers work – it represents the two positions in which a switch can operate: on (1) or off (0). So, when you see a binary sequence, it's merely a series of ones and zeroes. Below is a row of 30 ones and zeroes in a random order. How would you go about memorizing them in their correct sequence?

1 1 0 0 1 1 0 0 1 0 1 0 0 1 1 0 1 0 1 1 1 1 1 0 0 1 1 0 1

You can see why I thought a binaries round would be a great test of mental agility! This no doubt seems a tough challenge – although, of course, 30 digits wasn't nearly enough to tax the brains of the greatest memorizers in the world. For this discipline, competitors at the World Memory Championships are presented with at least 100 rows of 30 binary numbers and they have just half an hour to commit them all, in sequence, to memory.

In 1997, I managed to memorize 2,385 binary numbers in 30 minutes. At the time I set a new world record, but since then others have done better. How is this possible?

Well, like everything to do with feats of memorization, you need a system. In fact, once you've mastered the Dominic System (see pp.90–95), memorizing binary numbers is relatively straightforward.

My solution for cracking binaries was to create a code that turned them into numbers I could work with. I worked out all the possible groups of three binaries there could be and then gave each group of three a number code. So:

$$000 = 0 \quad 110 = 4$$

$$001 = 1 \quad 100 = 5$$

$$011 = 2 \quad 010 = 6$$

$$111 = 3 \quad 101 = 7$$

My system is simple – the first four combinations are represented by their sum and the last four simply continue the sequence of decimal numbers in a way that seems logical to me. To memorize a binary number, all you have to do is to memorize the codes, work out how they apply to the binary number and apply the Dominic System to turn the “proper” numbers into characters, which you place along a journey. In the Championships event, competitors are permitted to write the codes for the groups of three (or whatever system they're using) across the top of the binary digits.

You might think that learning how to memorize binaries has no benefit to you at all. However, if you want to attain a perfect memory, memorizing binary sequences is a fantastic practice exercise, because it combines all the elements that make up the best methods of memorization. So, please bear with me.

Here's another sequence of 24 binary digits. This time I have converted them into their code numbers (in brackets):

1 1 0 (4)

0 1 1 (2)

0 0 1 (1)
0 1 0 (6)
1 0 1 (7)
1 0 1 (7)
0 1 1 (2)
0 1 0 (6)

Once I've made the conversion, I pair the numbers, so that I get:

42 16 77 and 26.

And then to each of these I apply a character, using the Dominic System, which gives me:

David Beckham, Arnold Schwarzenegger, Ga Ga (Lady) and Bart Simpson. (You should use your own characters if you can, as they will be more memorable to you.)

When you position these characters along the journey, you use complex images (see [pp.96–9](#)), so that the first character in a pair becomes a surrogate for the action of the character that represents the second pair of numbers. So in fact, to memorize those 24 binary digits, I need only two stages of my chosen journey.

STAGE 1 I picture the English footballer David Beckham (42) weight-lifting. Beckham is using the action I associate with Arnold Schwarzenegger (16).

STAGE 2 I imagine the singer Lady Gaga (77) acting like Bart Simpson (26) and shouting ‘Eat my shorts!’

This sounds complicated and you may think that following so many processes just to memorize a series of ones and zeroes seems laborious and long-winded. However, your brain is an amazing machine – its processing speed is far faster than any computer. Think of the pianist who can convert notes to music in tenths of a second (a skilled pianist

can read up to 20 notes in a second) so that he plays his pieces flawlessly. Even as you read this sentence your brain is converting letters into sounds and giving them meaning without your consciousness giving you time to dwell on the process at all. It's all about practice, and when you know how to do it, and you work at getting better, like anything it can become second nature to you. Now try the exercise on the following page.

EXERCISE 9: Binary Bonanza

OK – so now it's your turn. If your brain can cope with the various levels of function required to get this right, you're well on the way to your amazing memory.

- 1 Using the codes on [page 125](#), convert the following 30 binary digits into workable numbers. Note down the codes for each set of three digits on a sheet of paper.

0 1 1 0 1 0 1 1 1 1 0 0 1 0 1 0 0 0 0 0 1 1 0 1 1 1 0 0 1
1

- 2 You have just 1 minute for the rest of the memorization element of this exercise (converting the codes to letters, then characters and placing these on a journey). Set a timer and then begin your memorization. When you've finished, write down on a sheet of paper the sequence of binaries (go straight to the binaries – don't write down the codes). Look back at the list to check how you did. A score of 18–24 binary digits is good; 25–30 is excellent.

- 3 Once you've completed this exercise successfully and confidently, ask a friend or family member to write you another list of 30 binary digits; or, using your computer, shut your eyes and just allow your fingers to type zeroes and ones randomly until you have a new sequence you

can use for practice. This time, give yourself a minute and a half, but try to incorporate the conversion to workable numbers into your time window – go from binary to memorization against the clock, as in the real World Memory Championships.

CHAPTER TWENTY-TWO

CHAMPIONSHIP PRACTICE: NAMES AND FACES

Once I'd won the first World Memory Championships (or The Memoriad, as it was known then) in 1991, I was thrust into the limelight, appearing in the news media across the world. Before too long I had taken on a manager and was soon appearing on TV on chat shows and game shows, demonstrating card memorization and showing the world that I could memorize the names and faces of entire audiences.

It's a funny thing being known for your amazing memory – it adds a certain pressure to perform at all times. If I'm at a function or if I'm teaching a room full of people how to improve their memory, it would be incongruous (and downright embarrassing!) to call someone by the wrong name. Being able to recall someone's name is an important social skill for any of us – and for me it's about proving that I can do what I say I can do, every time I meet a new face. It's also one of the heats in the World Memory Championships, and like binary digits it makes a great practice exercise for training your memory.

At the World Memory Championships, competitors are presented with photographs of 100 named faces and given just 15 minutes to memorize the faces and their corresponding first names and surnames. The photographs are then presented again in a fresh, random order and competitors have to match them up correctly. Let me tell you, they aren't always easy names! Competitors come from all over the world, so it's only fair that the names do, too – and we have to spell every single one correctly, or lose points. You can understand how mastering this stands

me in good stead when I'm in a live situation with real people in front of me.

To give you a flavour of what competitors face, here are a few names taken from actual World Memory Championships sessions: Detlef Sokolowski, Hlelile Esposito, Ahlf Vogel, Gad Hotchkiss, Xiulan Majewski. So you see, it's quite a feat of memorization to get them all right. At the time of writing, the world record holder is Boris Konrad from Germany, who memorized 97 names and faces correctly in the 15 minutes.

So how is it done? And does it make a good exercise for your memory? World Memory Championships competitors each have their own variations on several methods to memorize names and faces, but all of them follow the same principles, combining association, location and imagination.

Name associations

In order to memorize names to go with faces, names, like numbers, need to be translated into images. Let's say you're introduced to a man called Rupert Watts. For whatever reason, this man reminds you of your dentist – stick with this instant association and imagine the man in a dentist's white coat. What connections do you make for the name Rupert? Perhaps you think of someone famous: Rupert Everett the actor, or Rupert Murdoch the media tycoon? For me, Rupert gives "Rupert Bear", the children's comic-strip character. I picture a scene at my dentist's surgery where Rupert, dressed in white, is carrying a dental drill. "Watts" I associate with electricity, so I imagine Rupert Bear changing a light bulb in the surgery. The next time I meet this person, he'll remind me again of my dentist and the chain of associations will fast-forward his name to me.

Feature links

What happens if the person you meet doesn't immediately

remind you of someone? In these cases, I try to find a link between some physical feature in that person and their name. For example, I meet a woman called Tina who is not very tall – tiny Tina. Her surname is Bellingham, so I imagine tiny Tina ringing a bell coated with a slice of ham (BELL/rING/HAM).

The truth is, of course, that many names don't provide such a convenient link with a feature, but usually something is there. Rupert Watts might have a “pert” nose, or someone called Oliver Childs might have olive-shaped eyes or olive-coloured skin. It doesn't usually matter if the link is tenuous – it just has to be a little visual hook that triggers an association to reveal the name.

Beam me up Scotty

It's not always a visual feature (a likeness or physical characteristic) that triggers the context of a name memorization. Sometimes the name itself holds the key. For example, if someone tells me their surname is Holmes, I can transport that person to 221b Baker Street in London, home of the fictional sleuth Sherlock Holmes. I kit out the person's face with as many Sherlock Holmes connections as I can think of. I might imagine him (or her) wearing the deerstalker hat and smoking a pipe. Then, I have to plant the person's first name in the scene. If it's a man and he's called Peter, I imagine my father (also Peter) knocking on the door at 221b Baker Street, which Sherlock Holmes then opens. If it's a woman called Andrea, I imagine an android serving tea in Holmes's study.

“Hello, my name’s Arthur Stanislofsachinkolovspedeten”

We live in a diverse, multicultural society and as we travel more and meet interesting people from many different cultures, names and, in particular, surnames, can present

quite a challenge for even a seasoned memorizer like me. To make these stick, I have to break down the names into more manageable chunks.

So, for example, a surname such as Sokolowski becomes an image of a “sock on a low ski”. Keeping with the sock theme, for Esposito, I would imagine a sock with a hole to “expose a toe”. Have a go at thinking up associations to help you remember “Arthur Stanislofsachinkolovspedeten” – what weird and wonderful ideas can you come up with? Your brain, like mine, loves finding patterns and making links, so there’s always a way to make connections to help your memorization. (Test your associations tomorrow by writing the name down on a piece of paper and then looking back to see how close you are – did you get the spelling right?)

How to memorize a room full of people

So, if that’s how it’s done when I’m introduced to one person at random, or when I compete in championships, how do I show off my skills with a room full of people? I regularly give presentations, and my *pièce de résistance* is to memorize the names of every person in the room. If I have around 50 people in attendance, that’s pretty simple – it’s two fewer than a deck of cards! This time, instead of placing card characters along a journey, I put real people in their imagined guises at each stage. Remember my memory journey bank? I have several memory journeys of 50 stages that I save especially for memorizing names – I can link the journeys together, as I do with long card sequences, if I need to.

This is how it works. The first person in the room tells me their name. Immediately, I fix him or her to the first stage of my journey. Let’s say that’s the car park at my golf club. I imagine that I’m standing with that person in the car park. As I think about this image, I repeat the name out loud and look carefully at the person’s face. What jumps out at me?

Do they have a pointed nose? Curly hair? A scar on their brow or a mole on their upper lip? Does he or she remind me of someone I know, or of someone famous? Sometimes all I need is a small idiosyncrasy or mannerism to hook on to. Once I've fixed the image and made the associations with the name, I move on to the next stage in my journey and the next person in the room. I keep going until I've memorized every person there and their name.

The system works whether people are seated in an auditorium or moving around, because I can "place" the face at the right stage of the journey as soon as I see it again, even if the person is not actually sitting in the same location as when I memorized them. However, I don't usually do an entire auditorium or room in one go. We all have a "forgetting threshold", after which memorizations begin to be a bit hazy. The threshold may vary according to what kind of memorization you're doing – mine is pretty high for numbers (around 200 numbers) and cards (around 100 cards), but I know from experience that my threshold for names and faces is 15. After the 15th name and face I've memorized, I need to do a review of my journey so far (see [pp.75–80](#)), retracing my steps and the associations in my head, to be sure that I've made strong connections. Occasionally, I may have to ask someone to repeat their name because the link I made initially wasn't strong enough – I don't like doing this, but it does sometimes happen. Only once I've made my review can I feel confident about moving on to the next 15 names and the faces that go with them. Bear in mind that your own forgetting threshold might be greater or smaller than 15. It's important that you work out – by trial and error – where this is and space your reviews appropriately.

EXERCISE 10 (PART 1): Don't I Know You From Somewhere?

There's no substitute for being in a room full of people and having to memorize all their names, but this exercise is a good second best, and it's exactly how it works in the World Memory Championships, so it provides great practice.

Study the following ten faces. Use your powerful imagination to make a connection between each name and face, using the techniques outlined in this chapter. (You can use a journey if it helps you, but I won't ask you to repeat them in the right order, so you don't necessarily need one.)

You have 5 minutes to complete the memorization (and as long as you like to attempt the recall). When your 5 minutes are up, turn the page, where you'll find the same faces in a different order. Can you recall the first name and surname that goes with each of those faces?



BRIAN
MCGRATH



JACQUELINE
DACEY



BEN
COBURN



CHARLIE
KNOTT



JOSEPH
FLUTE



JUDY
BARRATT



ABDULLAH
SINGH



MERIEL
DALBY



TED
DOYLE



EMMA
STEVENS

Practice makes perfect

Social networking websites are marvellous for providing names and faces to test your skills of memorization. If you want to get really good at this – and practising really is the only way to do it – log onto MySpace or Facebook and pick some names and faces at random to practise making the connections. You'll soon develop your own instincts for forging links. For now, try the exercise opposite (part 2 – the jumbled-up faces – appears on the following page).

EXERCISE 10 (PART 2): Don't I Know You From Somewhere?

Here are the same ten faces you memorized on [page 134](#), but this time jumbled up. Can you remember their names? There are 20 names in all, ten first names and ten surnames. For each name you get right, award yourself one mark (total: 20 possible marks). A score of 12–15 is good; 16 or more is excellent.



1



2



3



4



5



6



7



8



9



10

CHAPTER TWENTY-THREE

CHAMPIONSHIP PRACTICE: ABSTRACT IMAGES

In 2006, I introduced a new discipline to the World Memory Championships: Abstract Images. It's a perfect test of someone's memory. Performing well requires no language skills, maths ability, or verbal reasoning – it's a memory "leveller", if you like, a pure test of memory agility, using the power of the imagination. Given 15 minutes, competitors must memorize as many black-and-white abstract shapes, presented in rows of five, as possible, in sequence. Once the 15 minutes are up, they are given a sheet showing the same images, but in a new order. They have to number the images on this second sheet to reflect the original position of each image.

I approach the challenge by looking at the images one by one and finding the first and fastest visual associations I can. Take a look at the following first row of five images. What do you "see"?



1



2



3



4



5

This is how they look to me:

- 1 A goat's head
- 2 A garden gnome
- 3 An oversized jockey riding a squirrel
- 4 A rabbit

5 A bat in flight

Once I have my associations I use them to create a story that helps me to memorize the correct order of the images. For example, I imagine a goat pecking at a garden gnome and, as he does so, a racing squirrel rushes by. The squirrel jumps over the rabbit, which is eating a bat.

I then place this mini-story at the first stage of the journey I reserve for abstract images (the first stage of my images journey is my back garden) to indicate that these were the images in the first row of five. Then, I memorize the next row of five images in exactly the same way, and place it in my predetermined journey at the second stage – around my garden shed. The journey preserves the order of the rows, while each story I create preserves the order of the images within each row. Here's a sample second row (this time I haven't numbered the images – this is because they aren't numbered in the Championships round, so it's more true to life):



What objects do the images conjure up in your mind's eye?

From left to right I see a funny little alien, a poodle looking up, someone praying, a big-nosed man in a strange hat, and a deer with short antlers. So, I imagine an alien opening the door to my garden shed, which is guarded by a poodle. Inside I see a man praying for mercy. He's being held captive by the guy in a hat. Nailed up on the shed wall is the head of a deer with short antlers.

Here are the same two rows of images, but in a different order:



By replaying the scene from my back garden I know that the original order for the images in the row above is: 4, 3, 2, 5, 1.



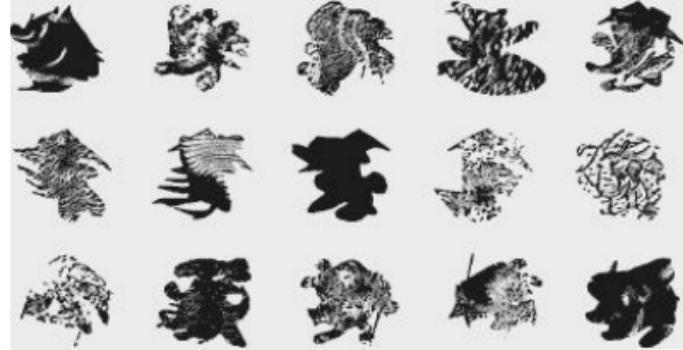
Cover the opposite page. Can you recall the original order for the images from row two?

In these examples, I've given you my associations, but of course different associations may have seemed more obvious to you. Each time the challenge is to find an association as quickly as possible and to work each one quickly into a memorable story. This provides a great way to hone your imagination and association skills. Try the exercise on the following page for yourself.

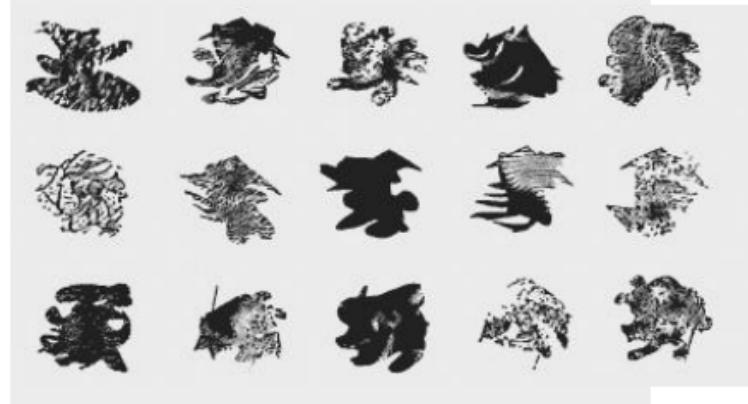
EXERCISE 11: Shape Shifting

Have a go at memorizing the three rows of abstract images in step 1, below. You have 5 minutes (set a timer to alert you when the time is up). Then, cover step 1 and try to restore the jumbled-up images in step 2 to their original order. Recalling two complete rows in the correct order is good; all three is excellent.

MEMORIZE THE IMAGES



2 REORDER THE IMAGES



CHAPTER TWENTY-FOUR

THE MEMORY CHAMPION'S LIFE: MAKING SPEECHES

As well as being expected to display impeccable memorization of every new person I met, I soon started to appear on TV shows to demonstrate my memory skills. Imagine: here I was, a man who as a kid had had no self-esteem at all. Now, all of a sudden, I had to learn how to present myself intelligently, express my thoughts clearly and overcome shyness in front of potentially millions of people at any one time. Thank goodness that proving to myself I had good brain power had done wonders for my confidence!

Even so, public speaking certainly wasn't my thing, and apparently I was in good company. The 19th-century American author Mark Twain (of *Huckleberry Finn* fame) was the guest speaker at a dinner with all the great leaders of the American Civil War. After they had made their long, heavy-going speeches, Twain stood up nervously to say, "Caesar and Hannibal are dead, Wellington has gone to a better world and Napoleon is under the sod. And, to be honest, I don't feel too good myself" – and promptly sat down. Things don't seem to have changed with time, either: in the USA a survey has claimed that many people fear making a speech in front of others more than they fear death!

Naturally, the greatest cause for speech anxiety is that your mind will go blank and at best you might start to babble something vaguely coherent, while at worst no sound comes out at all. In which case, read from notes, right? However, think about the most impressive speeches you've heard. Are they read by someone whose eyes look down and whose hands turn over pages? Probably not. The most

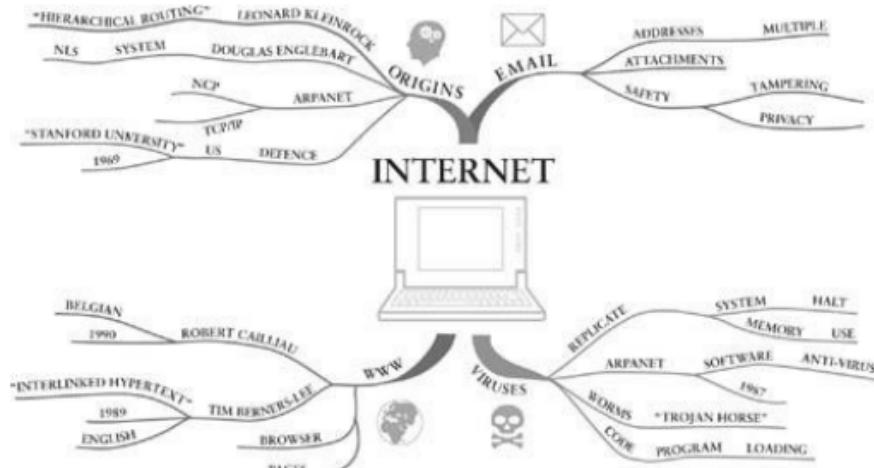
engaging, inspiring speeches are those given by a speaker who makes eye-contact with the audience, smiles at them and talks as if it all comes naturally. Memorize your speech and people will love to listen. And that's exactly what I had to master when I started giving talks, both on and off camera.

Be prepared!

A poorly prepared speech gets you off on the wrong footing. One of the best pieces of advice I've ever been given about delivering a good speech is, "Say what you are going to say, say it, then say what you just said." If you plan your speech before you write it, you can make sure that you edit out any information that's irrelevant or boring and structure the speech coherently, before you actually start writing the speech itself.

One of the best methods of preparation is a Mind Map®. Devised by Tony Buzan, co-founder of the World Memory Championships, Mind Maps provide a visual means by which to organize information around a central topic. In the centre of the "map" is the topic itself (the topic of your speech, in this case) then, as ideas and thoughts come to you, branches lead out from the centre, breaking down until you have a complete picture that shows everything you want to say. The aim is that this overview shows you where the links are between the elements of your topic, giving you a natural, coherent organization.

CREATING A MIND MAP



In a Mind Map® the main subject topic appears in the centre of the picture, and key ideas and pieces of information radiate outward. The picture enables you to organize information logically, so that you can construct a coherent speech, while also creating a visual memory trigger.

Let's say your speech is about the Internet. You write the word "Internet" in a circle in the middle of a sheet of paper, or perhaps you draw a computer. To make your Mind Map especially effective, you use a different colour for each main branch that leads from that central image – it's much easier to navigate around your map if it's colour-coded, and much easier to recall (think about how difficult it would be to navigate the map of a metro system if the different lines weren't defined by colour). Perhaps you could use brown for email, red for viruses, green for the World Wide Web, yellow for the origins of the Internet, and so on. From each of these main branches, sub-topics (sub-branches) will

occur to you. You can use a combination of icons and single-word descriptions to organize the sub-topics along their appropriate main branches.

The great thing about this tool is that it allows your brain to work randomly and creatively in planning your speeches, because it is not confined to the restrictions of linear preparation. You can attach topics and sub-topics as they occur to you without having to finish one before moving on to another. Once you've finished, with all your topics in full view, you can use your judgment about which branch you talk about first, and how to continue, until you've covered all the branches. I number the branches and subbranches to create the most natural, logical order of presentation.

Once you've decided how to organize your speech, make a numbered list of the main points in order, using the numbers on your Mind Map as a guide. For a short speech I usually get this down to five bullet points (each bullet represents about two to five minutes of talking time) – although a long talk will probably have up to 20. Once you've got your bullet points, you just need to memorize them using the Journey Method.

Applying a journey to your speech

The Journey Method provides you with the perfect memory aid to keep you on track during your speech, because you imagine yourself moving from point to point through the journey. If someone interrupts you with a question, you can immediately take yourself back to the position in the journey at which you were interrupted and pick up from where you left off.

So, once you have your bullet points, you need to give each one a visual representation that you can place at each stop on your chosen journey (I have several favourite speech journeys I store in my memory journey bank). I try to keep my visual cues as simple as possible, but when you first start out, you may need to replay a little scene in your

mind at each stop to remember certain things that you want to say – such as a relevant date.

In the speech about the Internet, you might start with information about its origins. The Internet was believed to have been born out of systems used for US defence. If my journey begins at my front door, I visualize this as Barack Obama pushing a big red panic button, which takes the place of the doorbell. This is enough to trigger the research I've done about the particular defence strategy that the Internet was used for. But how can I be sure to memorize 1969, the year that it all happened?

Using the Dominic System, 1969 gives me AN and SN, which I convert to the Swedish scientist Alfred Nobel (of Nobel Prize fame) and the actor Sam Neill. I imagine Alfred Nobel on a dinosaur (my prop for Sam Neill, who starred in *Jurassic Park*) coming to the door to give Barack Obama a prize. These images are enough to let me talk for a few minutes on the origins of the Internet. Once I've begun the speech, the visual memory of the Mind Map comes back to fill in some blanks. In the meantime, I mentally move to the next stop on my journey and the next point.

Applying the Link Method

I have many clients, ranging from TV personalities to businessmen and -women, who come to me for regular help with memorization techniques. One such client is a top British comedian. Years ago, he got into the habit of using an autocue to help him recall the gags in his act. The rolling script in front of him gave him two- or three-word descriptions of each gag or mini-routine. As he told one gag, he could see the cue words for the following gag come up on the autocue. Initially, the system worked well – his cue words for each gag were enough to help him stick to the sequence of jokes without it looking as though he were reading from the autocue. However, gradually his confidence in his own memory slipped away and he began

to use more and more words on the autocue. Instead of just one or two words per gag, he was using one or two cue words for *each element* of a gag, which meant that the overall routine looked less and less natural. The autocue was acting as a substitute for his working memory. When the severe doubts crept in, he called me for help.

I introduced him to the Journey Method – and he was a natural. A comedian with a highly creative imagination, he has no trouble using a mental journey to separate out the elements of each anecdote or joke and post one element at a time as a coded key image at the relevant stage of a route. He could use as many cues as he wanted per gag, because they were all in his head, so it never appeared to the audience as though the routine was scripted.

However, the Journey Method alone didn't help him go from one gag to the next, and that's why he incorporated the Link Method (see [pp.37–42](#)), too: as he gets to the end of one joke (the end of his journey), he sees a key image of the next gag cued up in his imagination and waiting for him. This acts as a memory trigger. For example, let's say the story he is telling is set on a riverboat and the gag that follows involves his uncle. As he delivers the punchline about the riverboat, he then sees in his mind's eye his uncle standing on the riverbank in a familiar pose. The key image of his uncle acts as a memory prompt or mental cue to allow him to move confidently on to the next joke in his repertoire (and that is enough to start him off on his next journey).

EXERCISE 12: Stand-up Comedian

How many times have you heard a comedian rattle off a series of short gags, promised yourself you'll remember them to tell your friends, but then completely forgotten them? The Journey Method can change that for ever. Create an associated image for each of the following ten jokes, then link that image to

stages on a ten-stop journey. Test the effectiveness of your links by doing a little stand-up show for a willing friend! Repeating five or six jokes in a row from memory is good; seven or more is excellent.

- 1 A little girl said to her dad that she'd like a magic wand for Christmas, and then added, "And don't forget to put the batteries in!"
- 2 The lottery: A tax on people who are bad at maths!
- 3 Suburbia: Where they tear out the trees and name the streets after them!
- 4 A Buddhist monk walked up to a hot-dog stand and said, 'Make me one with everything!'
- 5 Money talks. Mine generally says "Bye!"
- 6 Why was Santa's little helper depressed? Because he had low elf-esteem.
- 7 If at first you don't succeed, skydiving isn't for you.
- 8 Animal testing is a terrible idea – they get all nervous and give you the wrong answers!
- 9 If you told a cow a really funny joke, could she laugh so much that milk came out of her nose?
- 10 You know, when you've seen one shopping centre, you've seen a mall!

This combination of using a familiar route to memorize the elements of a funny story or gag and the Link Method to connect the stories or gags together guarantees him a completely polished and convincing performance.

Of course, working in this way is not just for stand-up routines – it can also work for long speeches or talks. For example, if you're conducting a training session for a group of new recruits in your field of work, you'll have several topics to cover over the course of, say, a morning. The company's structure, the ethos of the working environment, the main duties of the job, the telephone systems, and so on, are all aspects of a new job you may have to impart. In the

same way that a comedian creates a journey for a particular gag and uses a link to go from one gag to the next, you would use one journey per topic and then use the Link Method to conjure up a visual symbol of the following topic at the end of each journey. The possibilities for the system are endless.

CHAPTER TWENTY-FIVE

THE MEMORY CHAMPION'S LIFE: HOW TO BE A FACT FACTORY

For the summer of 1993, I became Radio 2's "Memory Man", touring with the station up and down the UK, so that the public could test my knowledge of number-one hits spanning the previous 40 years. Once a week, the DJ asked a member of the roadshow audience to shout out their date of birth. I then had to tell the audience member the title of the UK's number one single on that date, who the singer or artist was, how many weeks the song had remained at number one, and which record label it was issued on.

For example, if someone shouted out that their date of birth was February 23, 1956, I could tell them that the number-one single on that date was "Memories are Made of This" sung by Dean Martin. It was at number one for four weeks and released on the Capitol label.

How did I do it? To memorize the number ones, I gave each of the 40 years of hits its own journey, each month in that year an area on the route and each number-one single a specific stage within that area – usually there were around 20 number ones each year, so the total requirement was 40 journeys of around 20 stages (subdivided into month areas). At each stage, I placed a coded scene for the date that week's chart was released, the single's title, the artist, the weeks at number one and the record label.

So, for the Dean Martin single, the process went like this. The person was born in 1956, so I immediately go to my route for that year, which is the upstairs of my brother-in-law's house. I need the month February, and I know that

that is represented by the corridor. So I have my position for the year and month. The date I've been given is February 23, which I know fell in the chart week that began on February 21. February 21 is represented by the visual clue of my friend Julia holding a key (21 is the “key to the door” in the rhyme and Julia always used to carry a huge bunch of keys) and she's standing by the door to the linen cupboard on the corridor. Inside the cupboard I see a large, pulsating brain – this is my trigger for “**Memories** are Made of This”. I know what Dean Martin looks like, so he's there, too, and he's wearing a white **cap** (which gives me **Capitol** Records). However, he's not just standing by the cupboard, he's in a sailboat – the sail is the number-shape (see [p.83](#)) for 4 – four weeks at number one. (If there's more than one number one in a month, the different singles appear in different places at the one location, but as it happens, Dean Martin held his position at the top spot throughout February 1956.)

Mnemonic devices

Memorizing facts and figures using the Dominic System and the Journey Method will make you a formidable opponent in a general-knowledge quiz (I've memorized all the Trivial Pursuit answers, too!), but even simple mnemonic devices have a firm place in our repertoire of memory techniques.

EXERCISE 13: Factoid Fun

Here is a selection of ten UK number-one hits from the 1980s. Try to memorize the year that each song became number one. This is a lot easier than it sounds. Use the Dominic System to translate the years into characters, which you can then use to form associations with the song titles. For example, for me, 88 (HH) becomes the wrestler Hulk Hogan. To link

Hulk to the hit single, I picture him wrestling with a monkey and George Michael is the referee.

You have 10 minutes to commit the following to memory. Once you've finished, from memory write down the tracks and their years and artists. Score a maximum of three points for each song (one point each for the year, title and artist). A score of 18–24 is good; 25 or more is excellent.

1980 "Rock with You" *Michael Jackson*

1981 "Physical" *Olivia Newton-John*

1982 "Eye of the Tiger" *Survivor*

1983 "Beat It" *Michael Jackson*

1984 "Jump" *Van Halen*

1985 "Heaven" *Bryan Adams*

1986 "Sledgehammer" *Peter Gabriel*

1987 "Open Your Heart" *Madonna*

1988 "Monkey" *George Michael*

1989 "Eternal Flame" *The Bangles*

A word derived from the name Mnemosyne, the Greek goddess of memory, a *mnemonic* is any device that helps us to memorize a piece or pieces of information. The Journey Method, number– shapes and number– rhymes, and all the tricks for memorizing you've learned so far, are all systems of mnemonics. These help us to translate information into meaningful symbols, pictures, words and phrases so that our minds can more easily store them (in turn making them easier to recapture). Some of the simplest mnemonic systems are the most useful for storing facts or pieces of trivia. Below are some of my favourites.

Acronyms and extended acronyms

LOL, BTW, KIT – we live in a world where texting, "tweeting" and instant messaging encourages us to make

frequent shorthand communications. Many of us use initial letters as shorthand in written – or spoken – sentences on a daily basis. (Those few mean “laugh out loud”, “by the way” and “keep in touch”.) Even if you don’t text, you probably talk in shorthand about the BBC or CBS, ADHD and PMS. Acronyms are even easier, because they use the initial letters of the words you want to memorize to form another recognizable word. For example, if you were learning about atoms, you would learn that they are made up of protons, electrons and neutrons – PEN.

Extended acronyms, on the other hand, take the letter of each word to make a memorable sentence. For example, to memorize the seven continents (Europe, Asia, Africa, Australia, Antarctica, North America, South America), think of the phrase “Eat An Apple As A Nice Snack”.

Here’s a phrase I devised to memorize the seven deadly sins (Anger, Pride, Covetousness, Lust, Sloth, Envy and Greed): “A Politically Correct Liberal Seldom Enters Government!”

Extended acronyms are put to good use by medical students, who have to remember complicated anatomical terms. To remember the eight small bones in the wrist: Navicular, Lunate, Triquetral, Pisiform, Multangular (greater), Multangular (lesser), Capitate and Hamate: ‘Never Lower Tilly’s Pants, Mother Might Come Home!’

How would you go about using an extended acronym to memorize the nine muses? (Incidentally, they were the daughters of Mnemosyne and the king of the gods, Zeus.) They are:

CALLIOPE • CLIO • ERATO • THALIA • EUTERPE •
MELPOMENE • TERPSICHORE • POLYHYMNIA •
URANIA

You might think of “Count Clambering Elephants Thundering Eastward, Mighty Trunks Pointing Up”, or you might bend the rules a bit and make it a more fluid sentence

using a few more of the letters or sounds: “Call Clio ET. You (Eu) Twerp Mel, Turps isn’t Polyurethane!” The benefit of this second version is that it gives you more of the sounds from the names, which might help your recall – especially with unfamiliar names or terms.

I like to think of mnemonic devices such as acronyms as my “pocket” memory techniques – the easy memory systems that I keep at hand to make it easier to lodge facts as I pick them up.