2020 Vision

Mind Sports, Mind Mapping and The Brain

By Tony Buzan, Inventor of Mind Maps, and Ray Keene OBE, International Chess Grandmaster



Foreword by Dominic O'Brien Eight Times World Memory Champion



mens sana in corpore sano

This book is dedicated to the memory of Dr Marion Tinsley (1927-1995), the greatest Mind Sportsman of them all.

A message from Professor Barry Buzan, co-inventor of Mind Maps and co-author of the first Mind Map Book, from which the following passage is quoted.

Mind Mapping gave me a tremendous competitive advantage. It enabled me to assemble and refine my ideas without going through the time-consuming process of drafting and re-drafting. By separating thinking from writing, I was able to think more clearly and extensively. When it was time to start writing. I already had a clear structure and a firm sense of direction, and this made the writing easier, faster and more enjoyable. I completed my doctorate in under the prescribed three years, and also had time to write a chapter for another book, help to found, and then edit, a new quarterly journal of international relations, be associate editor of the student newspaper, take up motorcycling, and get married (doing a Mind Map with my wife-to-be to compose our wedding vows). Because of these experiences, my enthusiasm for the creative thinking side of the technique grew.

Mind Mapping remains a central element in my whole approach to academic work. It has made it possible for me to sustain an unusually high output of books, articles and conference papers. It has helped me to remain a generalist in a field where the weight of information forces most people to become specialists. I also credit it with enabling me to write clearly about theoretical matters whose complexity all too often inspires incomprehensible prose.

FOREWORD by Dominic O'Brien, Eight Times World Memory Champion

Staggering Mental Achievement

Did You Know That ...?

- Tathagat Avtar Tulsi from Delhi, when aged six, calculated the value of pi to seven decimal places (3.1415927).
- The highest ever prize for a Mind Sports event was the \$5 million shared by chess champions Bobby Fischer and Boris Spassky for their rematch in 1992.
- The world record number of internet hits for any single event was 22 million for the final game of the Garry Kasparov vs Deep Blue chess challenge in May 1997 in New York. This game, which lasted less than one hour, attracted 12 million more hits than the entire three-week 1996 Atlanta Olympics.
- Thursday August 20, 2020, the final of the Million dollar internet world tour, won by world champion Magnus Carlsen against US Grandmaster Hikaru Nakamura, attracted a barely believable 70 million viewers !! Both viewership and prize are online records.
- World Chess Champion Alexander Alekhine could challenge 28 master-strength players at one and the same time and still win the majority of games, without seeing the board or pieces.

- The six-time world champion Anne Jones is credited with a record of 4200 words per minute. The current record for memorising Pi.
- The US President and Congress declared the 1990s to be the 'Decade of the Brain'.
- Hiroyuki Goto of Tokyo has memorised pi to 42,195 digits.
- The greatest historical IQ has recently been established as that of Leonardo da Vinci at 220.
- Readers of the Washington Post have voted Genghis Khan as the 'Brain of the Millennium'.
- The first Mind Sports Olympiad was held at London's Royal Festival Hall in August 1997.

These are just a few of the astonishing mental feats and facts catalogued here. The authors, Tony Buzan and Raymond Keene, are ground-breaking pioneers in this arena, and themselves holders of impressive world records.

Tony Buzan is the holder of the world creativity record, while Raymond Keene, in three hours, has played chess against 107 different opponents at one and the same time, losing just one game. He was afterwards able to recall the moves of all 107 games perfectly, from memory, with no mistakes.

Together, they have also been at the forefront of global publicisation of mental literacy and mind achievements, and are acknowledged leaders in the field. Ray Keene holds the world record for books published on chess and mental combat (205), while Tony Buzan's books have been translated into 48 different languages and have totalled millions in worldwide sales. Both co-authors have together hosted or presented over 500 TV programmes on thinking and Mind Sports, while their track record, separately or in unison, in founding seminal Mind Sports initiatives, has been unrivalled - including the World Chess Championships of 1986, 1993 and 2000, World Draughts Championships of 1992 and 1994, and the World Memory Championships from 1991 - 2019.

> Dominic O'Brien August 2020

Sadly, Tony passed away tragically and prematurely in April 2019, however his banner continues to be held aloft by a dedicated team, including: myself, Dominic, Sania Alam, Chris Day, David Zhang, Lester He, Prince Marek Kasperski, Barry Buzan, Vanda North, Alexander Keene, Don Morris, Dr Jorge Castaneda, Michel Wozniak, Ian Hunt, Dr Guo Chuanwei, Dr Sue Whiting, Professor Michael Crawford, Prince Mohsin Ali Khan of Hyderabad, Cllr Frances Staunton, Lord Hardinge of Penshurst and Julián Simpole.

This book is a battle plan for the new era ushered in globally by Covid 19.

Keep your brain fit with Mind Sports Keep your body fit with Mindfulness and Healthy Diets Keep your creativity flowing with Mind Maps Fight the boredom and flab of global lockdown with the marvellous invention of Tony and Barry Buzan

Ray Keene OBE

Introduction by Ray Keene OBE

International Chess Grandmaster Global President of the Tony Buzan Group

In 1997, with Tony Buzan, Don Morris of the Champagne Academy and Sir Brian Tovey, Director General of GCHQ, I organised a multi Mind Games competition at London's Royal Festival Hall. The contest included various forms of chess and its variants, such as Shogi, Xiangqi and Shatranj. It was during this event that Demis Hassabis distinguished himself by winning the Gold Medal for the most versatile competitor.

The human brain has been described as the most complex structure in the observable universe. Consider the facts. Your brain weighs about the same as a bag of sugar, approximately 2 per cent of body weight, yet the brain alone accounts for up to 20 per cent of your body's energy needs. A thousand billion nerve cells are packed into every human head, and there are as many cells between your ears as there are stars in the Milky Way Galaxy. Each of these cells can be connected with up to 100,000 others and just counting each possible nerve connection in the human brain cortex - the outer layer - at the rate of one per second, would take 32 million years. Indeed, humankind's privileged place on the evolutionary ladder is not the result of powerful physique. Any self-respecting tyrannosaurus would easily have seen off a feeble specimen of Homo sapiens if such a temporally anomalous meeting had ever taken place.

No, our place in evolution is entirely down to our massive

mental power, unique in known creation. So, in my opinion, as a confirmed admirer, from a very early age, of the intelligent Odysseus, rather than the muscle-bound Achilles, described by Shakespeare, as "the sinew and the forehand of our host", the true answer lies clearly to hand. If you really want to live long and prosper, forget about jogging, jumping and honing those bronzed pectorals to glistening perfection. It's your brain you have to worry about. And one of the best ways to train your brain is to play chess, as Dr Joe Verghese of the Albert Einstein Institute in New York, has confirmed. By playing any, or all, of these or other mind-stretching games, such as bridge, crossword solving, draughts, sudoku or scrabble, medical and psychological opinions now suggest that you maximise your chances of a long and healthy life. Perhaps more importantly, one that remains at a high, even increasing, level of mental activity. Fitness and aerobics yes. but aerobics for the mind!

How long will we live? "Three score years and ten" is the most commonly quoted biblical estimate, yet the Book of Genesis itself (Chapter Five) suggests that the human span shall be a hundred and twenty years. More recent official figures for the UK put a woman's average life expectancy at 82.9 years and a man's at 79.3. But some experts now believe that it should, with improved lifestyles and medical advances, be reasonable for all of us to reach 100. After all, the most rapidly increasing age group in the USA is the over-85s, already with 50,000+ centenarians

Insurance companies devise actuarial tests to gauge longevity and, of course, their professional existence depends very much on getting this sort of thing right. Their questions divide up into fixed responses, i.e. items most people do not frequently change, such as, are you male or female, or how long did your parents live? Next, come variables, that is, items you can do something about.

Interestingly, of the 20 plus key questions which are standardly set, it is an eye-opener to see the huge extent to which mental performance, IQ and Mind Sports-related answers can make a difference, accounting for a staggering leeway of up to 11.5 productive years in your favour! Brain cells, or at least the ones that matter, do not inevitably die off as we age, nor do our mental powers automatically diminish. In fact, contrary to rumour and received opinion, brain power and articulacy can increase with age if the mind is kept active. The theory that we lose millions of brain cells every day, especially after a drink, has been widely accepted for years, but it is apocryphal. There is no scientific evidence for automatic brain cell loss with age.

The clinching examples which appeal to me are the superiority of later artistic works, such as Shakespeare's The Tempest, Leonardo's Mona Lisa and Beethoven's Ninth Symphony.

Consider this statement from Professor Arnold Scheibel, former head of the Brain Research Institute at UCLA Los Angeles:

"What can the average person do to strengthen his or her mind? Anything that is intellectually challenging can probably serve as a kind of stimulus for dendritic growth, which means it adds to the computation reserves in your brain. Do puzzles, try a musical instrument, try the arts, play tournament bridge or chess and remember, researchers, agree that it is never too late. All of life should be a learning experience, because we are challenging our brain and therefore building brain circuitry, this is the way the brain operates."

Additionally, research by Dr. Gordon Drw, also of UCLA, shows that higher brain functions can be improved by

listening to Mozart's music. According to his research, this has a similar effect on brainwaves to playing chess. Shaw compared three listening states Mozart's Sonata in D Major for two Pianos, a relaxation tape and silence and tested the subjects' spatial reasoning after each tape. In the short term certainly listening to Mozart raised IQ scores by an average of nine points above the other two tapes.

The beauty of competitive Mind Sports is that they are open to all. There are no barriers of gender, nationality or physical ability and no qualifying hurdles to jump, as it were.

I have often advocated the possibility of a committee of chess grandmasters coming together to help save the nation in times of adversity. The awesome collective brainpower of chess experts, such as Conel Hugh O'Donel Alexander, Harry Golombek and Sir Stuart Milner-Barry, had been harnessed once before to assist Alan Turing and the illustrious Nazi code breaking corps at Bletchley Park during the Second World War. Indeed, dulce et decorum est to recall their monumental achievements in shortening the war by up to two years and thus saving an estimated fourteen million lives.

And then history repeated itself. On March 18 2020 Dr. Demis Hassabis FRS CBE, described by the Times as "probably the smartest brain in Britain", and originator of AlphaZero, the strongest chess playing computer program ever developed, had been invited by Government Chief Scientific Adviser, Sir Patrick Vallance, to attend SAGE, the government committee (Scientific Advisory Group for Emergencies) designed to combat Covid-19. At the time of my writing about the codebreakers, the composition of SAGE had been a closely guarded state secret, but in the last few days the rules on confidentiality have been relaxed in the interests of transparency, and it has been revealed that Demis had been enlisted to serve in the national interest.

Before delving further into this matter, let me first digress. In 1482, when Leonardo da Vinci was thirty years old, he wrote his famous employment application letter to Ludovico Sforza, Duke of Milan. In it, he set out his full and impressive CV, cataloguing his numerous qualifications for the post.

I am grateful to Michael Gelb, author of How to think like Leonardo da Vinci, for his succinct description of Leonardo's Letter containing his qualifications, which I have summarised:

"In his CV Leonardo asserted his unique expertise as an anatomist, botanist, City Planner, Designer, Engineer, Geologist, Musician, Painter, Sculptor, not to mention military strategist and inventor of the tank and the parachute, even though humans had not yet mastered the art of flight. In fact, Leonardo's dimensions and vertical / horizontal ratios for constructing a successful parachute would have been accurate, even though no planes existed during the Renaissance from which the hypothetical parachutists might jump."

Now, just imagine, having got wind of Leonardo's appointment by the Duke, that the equally hypothetical mainstream media of the day, say 'La Posta Quotidiana' and 'II Guardiano', were outraged by the ducal promotion of a mere artist and fulminated mightily against Leonardo's presence on Ludovico's staff. Unthinkable, you might think!

But an outburst of rancorous moral indignation, based on Demis's ties to Google, is exactly what happened when Demis tried to help the government and the nation. One of Demis's multifarious qualifications is as an AI data specialist, and his skills must have been considered of significant importance in combatting Covid-19. A five times World Champion in Tony Buzan's technique of Mind Mapping remarked to me, that with Demis on board, at least the anti-Coronavirus measures will now work.

Mirabile dictu, or perhaps not, instead of being grateful that a genuine British genius was prepared to volunteer for SAGE to save British lives, the Daily Mail and Guardian resorted to morally outraged, screaming headlines, such as the Guardian's of April 30th: "Attendance of Demis Hassabis raises further questions about secretive group ... ", or the Mail's of the same date: "Anger as Google artificial intelligence expert is invited to secretive SAGE meeting ... " followed by minatory utterances, such as: "outcry, concerned, scrutiny."

Now is the time to cite some words of wisdom from a Central European thinker who escaped the clutches of the Nazis in good time: "There is perhaps no phenomenon which contains so much destructive feeling as 'moral indignation,' which permits envy or hate to be acted out under the guise of virtue." Erich Fromm, German Jewish Philosopher 1900-1980.

I first encountered Demis when he was eight years old and I was giving a chess simultaneous display against fifty-or-so Streatham school children, playing all games at once. All but one of my opponents succumbed without a fight, but one little dark-haired boy put up such a huge fight that I began to doubt I could win. "Grandmaster fails to defeat eightyear-old" was a headline I wished to avoid, so I summoned up all my experience against my last opponent standing and after a lengthy struggle I eventually won. It was though, absolutely obvious that this young kid already possessed formidable mental powers.

Later, Demis, as a student at Christ's College, was to represent Cambridge University in the annual Varsity Chess

match against Oxford, win Gold Medal in Pentamind, the multi-game discipline of the Mind Sports Olympiad, and in his own words, become world chess champion "by proxy." The justification for this claim was that, with his company, Deep Mind, Demis became the spiritus rector of the computer program which defeated the human World Champion in the fiendishly difficult oriental game of Wei Chi (or as it is more commonly known: Go), a feat previously considered impossible. Subsequently, his most spectacular exploit has been to create AlphaZero, the most powerful chess program the world has ever seen, or is ever likely to see. Hence the chess championship by proxy quip. Indeed, Demis would have been equally justified in claiming the proxy championship of the world of Wei Chi.

AlphaZero has developed strategies which confound the traditional ways of human thinking about chess. It sacrifices material for virtually invisible long-term prospects, it concentrates its forces and attacks, not by standard centralisation, but by retreating its most powerful pieces to squares at the rear and perimeter of the board, and it has no fear of simplification, even when suffering from significant material deficit. There is no doubt that the current and future generations of chess Grandmasters are busy learning from AlphaZero and adapting to its strategies, many of which are explained in the ground-breaking book Game Changer by the Grandmaster team of Matthew Sadler and Natasha Regan (in my opinion one of the most important texts on chess ever written.)

A grateful Monarch and nation have already rewarded Demis with the CBE. As coronavirus is gradually pushed back, I predict that Demis will be able to add a flesh and blood knighthood to the wooden knights he manoeuvres so deftly on his chessboard. I leave the final word to Demis himself -as he told the Times: "There are so many problems out there from Alzheimer's disease to climate change ... where we seem to be making almost no progress. I'd be much more pessimistic about the way the world is going to go if I didn't know there was something as game-changing as AI on the way."

So what lessons can chess and other Mind Sports teach us for the future, for the post pandemic world which will emerge from the trauma of the Coronavirus cataclysm? During the crisis, chess, in common with the weekly shop, has pivoted decisively towards online activity. Every major chess tournament until the end of the year has now been scrapped, including the British Championship, the elite Isle of Man Open and the Grand Chess Tour circuit.

However, unlike the postponed 2020 Tokyo Olympics, chess can easily be played online. The Four Nations Chess League, essentially the UK's internal team championship, has switched online. Arnold Schwarzenegger has appeared on social media, reliving a somewhat catastrophic loss to Garry Kasparov, engaging in a humorous clash of chess arms with his pet pony Lulu, but above all urging his vast online audience to keep their brains fit and stimulated during the Covid lockdown, by taking up chess.

On Twitter, Schwarzenegger recently tweeted at Kasparov: "Thanks for always giving back and teaching chess to kids. Because of your inspiration, chess is part of our after-school programs. Now we have youth chess at every @ArnoldSports festival around the world. I hope to catch up soon & learn more!"

Magnus Carlsen, the reigning World Champion, has organised an online tournament for the world's top eight players, including himself, with a record \$1,000,000 prize fund for an online chess competition. Chess.com an online site where anyone can challenge human or computerised opposition, learn about chess strategies, ploys and tactics, and, of course, also follow archived and live Grandmaster games, reports a surge in subscriptions during Coronabedevilled March 2020, that would normally have taken ten years to achieve.

The audience for chess now exceeds anything ever before seen in the history of the game, and it is all on line. It is my view that the indicators from the world of chess plot the future of the world at large. Buy shares in supermarkets with online delivery services, expect online education and personal development resources to explode, look out for an expansion of high-quality restaurants introducing home delivery services and watch closely as newspapers wither and media vehicles transfer to online delivery of opinion and information. Indeed, YouTube already boasts more young viewers than all UK terrestrial TV channels combined.

"Tournaments will be broadcast live across multiple outlets including Fide's and Chess.com's own channels across Twitch, YouTube, Mixer, Twitter, and other international streaming platforms. With an estimated audience of several million worldwide, commentary by chess experts will be conducted in multiple languages, including English, Spanish, Russian, Mandarin, French, German, Portuguese, Italian, Turkish and Polish.

There is a point about chess, which expands what I said earlier about the statistics of mass participation. Namely, that the digital future is not just one of sponsored tournaments online for the elite, but that greater access in general, and specifically for those previously excluded, could evolve into a valuable social tool. Though chess clearly begins and spreads historically as an elite game, it has since shown a considerable capacity to appeal to / console the disadvantaged - prisoners, the sick, those in tough conditions. Here are some statistics concerning one of the world's most popular online chess services: www.chess.com. This site offers chess tuition, live coverage of important tournaments, archives of outstanding games from the past and, of course, the facility to compete against human or computer opponents around the world, at any time of the day or night, whenever and wherever you are. According to some YouGov statistics of a couple of years ago, globally there were 600 million chess enthusiasts - a figure that was much denigrated by a handful of doubting Thomases.

At the time of writing chess.com could proudly boast that they had some 30 million members and that an astonishing 4,453,868 games had been played online, on their site alone, during the day I checked. On Wednesday April 23, just twelve days later, I returned for an update. Membership had risen to 36,092,133, while the total of games played during the past twenty-four hours had increased to 4,850,067. If one site can attract such numbers, it does not demand a huge leap of faith to accept the veracity of that old figure of 600 million chess enthusiasts around the planet. Indeed, as already noted, chess.com reported that during March alone of 2020, their subscriber base had increased by a quantity that would normally have taken them ten years to achieve. It is evident that this bonanza has been driven by the multiple national lockdowns caused by the Coronavirus. As entire populations retreat into the fortresses of their own homes and pull up the drawbridges behind them, it has become apparent that chess, as a challenging and stimulating mental exercise, is the ideal activity for isolated individuals and families to fill their newly discovered spare time. Photos now appear regularly on social media of grandparents playing chess against their grand-offspring, the English Chess

Federation in conjunction with the charity Chess in Schools and Communities has launched an ambitious online programme to attract a million school kids to take up chess, and the ease with which chess can now be played online accounts for the massive surge in membership for chess.com - which is, in fact, just one chess site among many.

The most indicative chess trend, with reverberations for the world at large, is that major chess events are now moving rapidly online, and may well stay there. The games between grandmasters and champions remain just as exciting and instantly accessible as physical events. Expert live and online commentary is readily available. Why spend money on hotels, travel, meals and an expensive playing venue, when all such costs can be spared and funds poured instead into the prize purse? Online chess is a win-win situation for both organisers and competitors. This trend is visibly spreading to other mind sports. The World Mind Mapping, Speed Reading and Memory Championships, all dreamt up by the fertile brain of the late Tony Buzan, are now considering an online dimension.

CONCLUSION

So, as we retreat behind our individual castle ramparts, it is becoming apparent that in the post Covid-19 environment, those enterprises will flourish which can adapt to online delivery of their services. After 9/11, the act of applying for a high street business bank account gradually became an exercise in pulling teeth. Last week it took just half an hour to open an account with Starling Bank, a purely online venture. More or less simultaneously, another bank, the venerable Coutts, founded in 1692, sent out emails to promote online ordering of home delivery meals. The bountiful choice embraced ready to serve cuisine from gourmet restaurants, delicatessen standard fresh food, ranging from Cornish crabs and lobsters to vegetables and fruit from English and European market gardens. Furthermore, Bread Ahead Bakery in Borough Market have instituted daily online tutorials, delivering flour and yeast for home-baking, while giant eggs are on offer via online ordering from Norfolk Geese. These are a tiny sample of a wide and rapidly expanding trend. A whole new land of plenty has opened up online, without the need to stir from one's home.

Sadly, however, those which cannot will go the way of the dinosaurs after the Chicxulub extinction event at the end of the Cretaceous period. The future is online and, as millions of new devotees are discovering, online Mind Sports are helping to show the way.

Ray Keene OBE Global President The Tony Buzan Group Former World Chess Champion Garry Kasparov



Former World Draughts Champion Dr Tinsley and Chinook



MIND SPORTS BACKGROUND

Chess

Chessplayers are ranked according to gradings devised by the World Chess Federation (FIDE). A moderate club player would have a ranking of between 1000 to 1200; a class 'A' player a ranking of 1800+; an expert a ranking of 2200+; an International Master a ranking of 2400+; and a top-ranking International Grandmaster a ranking of over 2700.

World Champion Garry Kasparov is a particularly good example of a well-rounded and integrated, holanthropic human being. His friends describe him as a cultivated and curious man who closely follows literature, film and politics. To keep his brain in shape he keeps his body in shape. He runs, swims, cycles and plays soccer as part of his training programme for World Championship matches. Kasparov makes full use of the range of his mental skills while playing. He is described as the artist of the chessboard, taking bold chances, making breath taking sacrifices and hunting for the opponent's king with passion. 'From the very beginning of a game, I strive to make it as sharp as possible and to take it outside the familiar patterns,' he once said.

Kasparov states: 'For me, chess is above all art, with elements of science and sport.'

Speed Reading

Speed reading tests are primarily based on the reading of novels. The reader has to read an entire novel as fast as possible, subsequently giving a presentation to people who have already read the novel in depth. This presentation has to include knowledgeable comments about and integration of the following main areas: characters, setting, plot, philosophy, symbolism, language level, literary style, metaphor, themes and historical context.

Creativity

Creativity is defined by Torrance, the doyen of creativity testing, as follows: 'Creativity is a process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies and so on; identifying the difficulty; searching for solutions; making guesses or formulating hypotheses about the deficiencies; testing and re-testing these hypotheses and possibly modifying and retesting them; and finally communicating the results.'

Torrance Tests of creative thinking were developed to assess the process and especially the ability of the subject to think divergently and originally. Such tests also challenge the testtaker not only to find a solution, but actually to invent the problem to which he or she will provide a solution. The success of the test-taker will express itself through the divergent thinking factors of fluency; flexibility; originality and elaboration. It is argued that every creative production is at the same time the result and manifestation of these four factors of divergent thinking.

Fluency reflects the test-taker's ability to produce large numbers of ideas with words (verbal fluency) or with pictures (figural fluency). Quantity or ease with which associations flow is the main characteristic.

Flexibility represents the test-taker's ability to produce different kinds of ideas; the ability to shift from one approach to another raising a rich variety of strategies.

Originality represents the ability to produce ideas that are

unusual, unique, and far removed from what is normal or commonplace. A person scoring high in originality may be perceived as nonconforming, but this does not mean that such a person is either erratic or impulsive. On the contrary, originality is the result of considerable 'controlled' intellectual energy, and generally a capacity for high levels of concentration.

According to Torrance, high scores on elaboration indicate that the subject is able to develop, embroider, embellish, carry out or otherwise elaborate ideas. Such persons are likely to demonstrate keenness or sensitivity in observation.

Normal scores in the verbal scale are:

Fluency77Flexibility27Originality37

The highest registered scores in the world to date were achieved by co-author Tony Buzan: Fluency 249, Flexibility 94 and Originality 368. Throughout the test Tony also achieved an originality score on the figural scale of 100%. Creativity, like any other mental skill, can be taught and learned. In preparation for his Torrance test, Tony Buzan, like Kasparov, trained himself physically, and honed his Mind Mapping and memory skills before breaking the world record.

Mind Mapping as an Aid to Memory, Creativity and IQ

Mind Mapping is a simple, practical tool that can help you:

- Think faster and more creatively
- Get more work done in less time
- Improve your memory
- Plan projects, prepare presentations, run meetings and solve problems with ease

A Mind Map is a simple, easy way to represent your thoughts using key words, colours and imagery. Its non-linear format encourages you to begin generating ideas immediately and allows you to put a tremendous amount of significant information on one piece of paper. Mapping integrates your logical and imaginative thinking to increase your productivity.

Mind Mapping was developed in the early 1970's by coauthor and brain researcher Tony Buzan as a whole-brain alternative to outlining. It makes it easier to access the tremendous creative potential of your brain.

For an illustration of one of the world's largest Mind Maps, see the plate section of this book.

Uses of Mind Maps

Mind Mapping is a powerful tool for improving your effectiveness in planning, remembering and communicating. Mind Mapping improves:

Planning Meetings Conferences Presentations Budgets Strategic vision Projects Brainstorming sessions Performance appraisals



Dominic O'Brien, Ray Keene and Tony Buzan launch the Mind Sports Olympiad



Ray Keene opens the 1993 World Chess Championship in London

Intelligence Quotient (IQ)

IQ is a concept that is often mistakenly assumed to have begun with a desire to limit peoples' freedom by classifying their intellectual capacity. Nothing could be further from the truth.

In the early part of the last century, a Frenchman, Alfred Binet, observed that virtually all students attending universities were from the upper classes. Feeling this to be intrinsically unfair, he attempted to devise tests that would be 'class free', and that would enable any child to advance through the academic system on intellectual merit alone. In a work of deep social conscience and considerable intellectual rigour, he selected basic abilities such as vocabulary knowledge, ability to manipulate numbers and short-term memory, testing massive sections of the population in each of these skills. Those who scored averagely for any age group were given a score of 100, those scoring below or above being given scores below or above 100 depending on how far they were from average. Thus, a score of 70 was particularly low, a score of 130 especially high (in the 'genius' range).

Only in the last few decades have the IQ test begun to form, against the obvious wishes of its originator, its own class system. For a number of years, it has been assumed that intelligence quotients are a reflection of an innate ability and are unchanging.

Work by many researchers, including a number of members of the World Buzan Club, has shown that the IQ score can be seen much like a high-jump bar. Whatever score you achieve may be considered the 'height you can jump at the moment'. With appropriate training your score can go, should you wish, either down or up!

Who were the Greatest Historical IQ's?

The most in-depth work on this topic appears so far to have been done by C.M. Cox, who wrote in Genetic Studies of Genius (1923) about historical figures and their probable IQ's. Cox had five different psychometricians estimate the IQ of the historical great brains on the basis of biographical data between their ages of 17 and 26. Cox then averaged the scores of the five psychometricians, and using his own psychometric and historical knowledge, presented an estimate of their most probable IQ's.

Rank	Name	IQ	Rank	Name	IQ
1	Goethe	210	15-17	Coleridge	175
2	Leibnitz	205	15-17	J.Q.Adams	175
3-4	Newton	190	15-17	Kant	175
3-4	Pitt (younger)	190	18-21	Tennyson	170
5	Galileo	185	18-21	Faraday	170
6-14	da Vinci	180	18-21	Handel	170
6-14	J.S.Mill	180	18-21	Raphael	170
6-14	Hume	180	22-27	Wordsworth	165
6-14	Erasmus	180	22-27	Sam.Johnson	165
6-14	Descartes	180	22-27	J.S.Bach	165
6-14	Bacon	180	22-27	Disraeli	165
6-14	Dickens	180	22-27	Mozart	165
6-14	Milton	180	22-27	D.Webster	165
6-14	Michelangelo	180	28	Rembrandt	155

Top IQ's of the Great Brains (according to C.M.Cox)

The scale by which Cox measured these IQ's would have the top 2% threshold (eligibility for entering Mensa) as an IQ score of 138. In order to judge how frequently the alltime top scores would occur in the human population, the following table is provided:

Our own conclusions on the record historical IQ's are as follows: There are some startling omissions from the Cox

IQ	Ratio in Population
150	1 out of 300
160	1 out of 3,000
170	1 out of 30,000
180	1 out of 100,000
190	1 out of 1,000,000
200	1 out of 10,000,000
210	1 out of 100,000,000

list, such as Shakespeare! There is also no excuse for leaving out Einstein, for example: his Specific and General Theories of Relativity were already well known in 1923. Our own calculations result in somewhat different conclusions on the top IQ's.

Top IQ's of the Great Brains

(according to Tony Buzan and Raymond Keene in Buzan's Book of Genius)

Rank	Name	IQ	Rank	Name	IQ
1	da Vinci	220	8	Archimedes	190
2	Goethe	215	9	Aristotle	190
3	Shakespeare	210	10	Brunelleschi	190
4	Einstein	205	11	Copernicus	185
5	Newton	195	12	Franklin	185
6	Jefferson	195	13	G.Eliot	180
7	Edison	195	14	J.S.Mill	180

It is interesting that the Cox analysis and our totally independent enquiry both produce an identical number of IQ record holders of 180 or above. In Cox's case 14, whilst we also identified 14!

Grandmasters of Memory

The concept of the Grandmasters of Memory was officially announced at the 1995 World Memory Championships at top London restaurant Simpson's-in-the-Strand, where the competitors' overall performances were beginning to reach grandmaster level. The first people to attain the title of Grandmaster of Memory were (ratings in brackets):

Dominic O'Brien (reigning World Memory Champion) 2814

Jonathan Hancock (former World Memory Champion) 2710

Mark Channon (originator of the TV series Memory Masters and, until recently, a dancer in the West End musical show Crazy for You) 2577

Andy Bell 2569

Kevin Horsley (South Africa) 2545

Philip Bond (Pi memoriser) 2504

Creighton Carvello (the original 'Memory Man') 2464

Patrick Colgan (Ireland) 2452

The inaugural Memory Grandmaster titles were actually awarded at Hanbury Manor, near London, in October 1995. The Memory Award ceremony was a conscious homage to the very first award of chess grandmaster titles at St Petersburg in 1914 by Czar Nicholas II to the greats of the world's most widespread Mind Sport. The original chess grandmasters were Emanuel Lasker, Jose Raoul Capablanca, Alexander Alekhine, Siegbert Tarrasch and Frank Marshall. The award of the memory titles was jointly sanctioned by His Serene Highness Prince Philip von und zu Liechtenstein, The Brain Trust Charity, which endorsed and hosted the event, and Tony Buzan, International Arbiter of Mental World Records.

Chess

Brief Description

Chess is a board game representing a battle in which the players move alternately, trying to capture (or 'checkmate') the opponent's king, around the planet either play chess, are



fascinated by it, or follow the exploits of its leading practitioners. The World Chess Federation, FIDE, with 130 member states, is the largest Mind Sports organisation in the world. Chess, shogi and go are capable of making millionaires or even multi-millionaires of their leading exponents. The prize, for example in the 1992 Fischer-Spassky match was a staggering \$5 million. And that contest was not even for the official World Championship!

Historical Development

Origins

Chess is said to have originated in India around AD600 under the name 'chaturanga'. This was a word describing the four traditional army units of Indian military forces, namely

foot soldiers (pawns), cavalry (knights), chariots (rooks) and elephants (which have come down as bishops in contemporary chess).

The name 'chess' is derived from the Persian word 'Shah', meaning a king or ruler. This word is also related to 'check' and may even be cognate with the words Caesar, Kaiser and Czar, respectively denoting rulers in the Roman Empire, the German Empire and the Russian Empire.

The earliest written reference is from an ancient Persian poem of the late sixth century AD, the Chatrang Namak. Chess, in its original (rather slow) form flourished during the Baghdad Caliphate in the tenth century AD. The top player at that time and first chess genius was As-Suli.

The Modern Game

Around 1475 chess underwent a rule change which led to the pieces becoming more dynamic, essentially leading to the Western or 'international' form of the game as we know it. It was at this time that castling was introduced, pawns gained the privilege of advancing two squares on the first move, and the queen was transformed from a waddling cripple of a piece (the Arabic vizier), to one of devastating mobility. It is doubtless the almost overnight increase in the strength and manoeuvrability of the queen which explains the joyous adventures and excursions with it, the giving of check being particularly popular, whether it advanced a player's cause or not. This can be observed in the recorded games of the new chess up to the early 17th century.

Chess is a game that symbolises warfare, so the increased fire-power of the queen surely reflects the introduction of artillery in the mid-15th century sphere of battlefield technology. The sudden advances in chess must, overall, also be explicable in terms of the Renaissance dynamic, the increasingly urgent perception of distance, space and perspective which distinguishes that phase of human intellectual development. The telescope, the microscope, the use of siege artillery to batter down the walls of Constantinople in 1453, and perspective in art, were all parallel developments.

Columbus discovered the New World for Spain in 1492, and it was fitting that the fresh impetus for chess, as it arose from the tortuous Arabic and medieval form, should also have come from Spain. Why was the spread of the new chess after 1475 so rapid? The answer, often overlooked, is that Spain at that time was the dominant centre for world communication, and thus spread the new chess globally through its explorations and conquests.

SHOGI (JAPANESE CHESS)

Brief Description

In the past few years, sumo wrestling has become widely popular as a spectator sport in the west. Now Japan is exporting a more esoteric, indigenous pastime as increasing numbers of occidentals are taking up shogi, the distinctive home-grown Japanese national board game and their version of chess. In Japan there are a staggering 15 million regular shogi players, every newspaper has a daily column and television offers a weekly instructional programme of ninety minutes duration. Sponsorship, which comes mainly from newspaper syndicates, is big business, with top professionals earning something approaching £1 million in one season. Earnings derive from prize money, salaries, game fees and royalties from books. Top shogi players are sufficiently well known to feature regularly in TV advertising, promoting a



Tony Buzan

Ray Keene, Tony Buzan, Dominic O'Brien and London Zoo's Memory Elephant – Lay Ang Lay Ang


range of products. In Japan the public image of shogi combines the popularity and glamour of snooker with the intellectual rigours of chess.

Shogi is played on a 9x9 board with 20 flat, wedge-shaped pieces per side (see illustration in plate section). It has many elements that will be readily recognisable to the chess player. In both games the aim is to checkmate the opposing king. Shogi players each have a king, a rook, a bishop and nine pawns, all of which move in the same way as their chess counterparts, but the knights are more restricted in scope. Shogi also sports the romantically named golds, silvers and lances, whose moves have no chess equivalent.

Most shogi pieces have the power of promotion, which in chess is confined to pawns alone, but undoubtedly the most striking feature of the Japanese game is the 'drop' which allows a piece captured from an opponent to be dropped back onto the board at strategic moments to reinforce attacks and defences. Captured pieces in shogi never vanish permanently from the board but instead defect to the enemy. This perhaps indicates that when shogi was being developed it accurately reflected the behaviour of real-life Japanese mercenary armies on the battlefield.

XIANGQI (CHINESE CHESS)

Brief Description

The object of xiangqi, as with shogi and western chess, is to checkmate your opponent's king. (A king is checkmated when no reply can get it out of check.) The side who forces the mate scores a win against his or her opponent. Unlike western chess, where a stalemate is a draw, one can also win in xiangqi by forcing your opponent into a position where there is no legal move. Also, like go but unlike chess or shogi, play is on the intersections rather than the squares (see illustration in plate section). In addition, you win if your opponent resigns or oversteps the time limit.

Chinese chess has more possible first moves than western chess. Double checks are extremely common during play, with occasional triple checks. In fact, it is possible 'to give quadruple checks in Chinese chess.

A high percentage of western chess players in China are actually xiangqi crossovers. Chess Grandmasters Xu Jun, and Ye Jiang Chuan were both at one time xiangqi hopefuls. Of course, the most famous example is former Women's World Chess Champion Xie Jun, who was a junior xiangqi champion in Beijing.

The most popular opening is the Cannon Opening, in which Red (who goes first) moves a cannon to the central file, attacking Black's centre pawn. In theory, this gives Red a longer initiative than any other opening.

Historical Development

Origins

There are many similarities between xiangqi and its western cousin and this certainly suggests a common origin. Although, historically, the Chinese have always maintained xiangqi was locally invented, the prevailing theory on the origin of chess before the 1970's (which was largely based on H.J.R. Murray's work) favoured the so-called 'Indian Connection'. However, since the 1970's, more and more weight has been given to the idea that China already had a version of chess before India. This is an intriguing area of Mind Sports history, which requires further research, and, given the great antiquity of go, the Chinese may well have a valid prior claim.

There were mentions of the game 'xiangqi' in documents during the Warring States period (403-221BC) and even earlier. Chinese historians generally agree that the modern version was reached sometime during the late Tang Dynasty (AD618-906). This is supported by recent unearthing of ancient artefacts, with a xiangqi set identical to the modern set that dated back to the Song Dynasty. For a long period, xiangqi was snubbed by high officials, and the game of go was preferred by the higher classes. However, xiangqi, with its charms and characteristics, quickly became a game for the masses. From the Song Dynasty through the Qing Dynasty, the game began to be more accepted by officials, and numerous records were referenced in bureaucratic manuscripts and scholarly works.

XiangQi Stories

The Qing Dynasty's 'Last Emperor' Pu Yi, in his autobiography, recounted the true case of the Dowager Empress Tzu-Hsi (CiXi by PiuYin), who was very fond of the game. One day the Empress was playing one of the old servants. The servant said 'Your humble servant will take your Highness' horse', and the Empress broke into a sudden rage: 'Then I'll take your life!' And she ordered her opponent promptly beheaded.

Song Dynasty's first Emperor, Zhao, supposedly lost the mountain HuaShan as a wager on the result of a game of xiangqi to ChenChuan, a fairy-like figure. The opening that Chen used, the Pawn Opening still carries the nickname 'Fairy's Hand'.

Hu HanMin, a close associate of Dr Sun Yat-Sen and one of the most prominent figures in the founding of the People's Republic of China, died while playing xiangqi. In a winning position, Hu inadvertently let his rook be pinned in front of his king by his opponent's cannon. He promptly had a stroke and died.



Grandmasters of Memory Awards



International Grandmaster of Memory medal

'Chess is humankind's greatest invention. Go, its greatest discovery ...' Chinese proverb

Brief Description

The Chinese game of go has been said to be an analogy for business management, Buddhist theory and warfare. (A book entitled The Protracted Game was published in the mid-1970s proving that Mao Tse-Tung's military campaigns were based on go strategy.) Go is about 4,000 years old. In China it is called wei ch'i, 'the surrounding game', but it reached Europe from Japan, and is therefore usually known here by its Japanese name.

It is a game for two players. Black and white pieces (stones) are placed alternately on the intersections of an initially empty $19 \ge 19$ board (see diagram on next page). Victory goes to the player who ultimately controls more territory.

Historical Development

Origins

There are several legends about the origin of go. The most popular has it that the game was invented by a Chinese Emperor 'to strengthen his son's weak mind'. Most players would certainly claim that go is mind-bending! It is referred to in Chinese texts of about 1000BC as a game any reader would know. Yi Qiu was the first named go player in literature, being mentioned by Mencius in the 4th century BC, although the first book exclusively on go was not written until about AD700. Confucius is said to have known how to play, and traditionally the Four Sublime Pastimes were music, painting, calligraphy and go.



Growing Popularity and Military Training

Although it reached Japan around AD700, go was for centuries prohibited for the common people. It remained a privilege of the nobility and in particular the samurai, who regarded go as good military training, and even took it with them on campaign. The game achieved a peak of prestige in the 17th to 19th centuries, when it enjoyed the patronage of the shoguns. Four professional go academies were established, and there was great rivalry which culminated in the Castle Games. This was an annual match played in the presence of the shogun. Contestants were not allowed to leave the castle until the games were finished. The parallels with the development of shogi in Japan at that time are quite fascinating and reveal a society deeply absorbed by mental games.

Indeed, as early as the 16th century in Japan, both shogi and go came under the direction of a government department, the Ministry of Shrines and Temples. Both games were thought to be an adjunct of the Buddhist religion, possibly as a result of the attitudes of contemplation and meditation, common to these activities.

Ignoring the Bomb

Although its go column had been suspended in March 1945, the Mainichi newspaper supported the third Honinbo title match. Iwamoto Kaoru, 7-dan, was the challenger to Hashimoto Utaro. Finding a venue in bombed-out Tokyo was impossible, but Kensaku Segoe came to the rescue; with the help of friends, he arranged for the match to be played in his hometown of Hiroshima. The players had been warned by the Hiroshima police chief not to play within the city, as it was too dangerous. They took advantage of his temporary absence to play the game as scheduled, on 23-25 July, ignoring the rain of bullets on the roof from strafing aeroplanes. Iwamoto won.

When the police chief heard on his return what they had done, he was furious and absolutely forbade them to play any more games in Hiroshima. It was arranged to play the second game in a house in Itsukaichi, an outer suburb of Hiroshima, on 4-6 August.

On the third day of the game, the players saw the Enola Gay fly in. Hashimoto later stepped out into the garden and saw the flash of the atomic bomb and the mushroom cloud rising above the city. A great blast of wind broke the windows, made a mess of the room and upset all the pieces, but since they had reached the endgame, they set the position up again and finished the game, which led to a five-point win for Hashimoto. It was not until evening, when the streams of survivors pouring out of Hiroshima began to reach Itsukaichi, that they realised the magnitude of the disaster and just how lucky they had been. The house where they would have played was destroyed.

Both players survived into the 1990s and Hashimoto Utaro died in 1994.

The Go Player's Almanac, p.57-58. Ishi Press, Tokyo.



DRAUGHTS/CHECKERS

'The mind is inured to caution, foresight and circumspection ...'

Dr Samuel Johnson, from his introduction to William Payne's 1756 *Treatise on the Game of Draughts*.

Brief Description



Draughts is played by two opponents facing each other over a board of 64 squares, with Black moving first. The board is arranged with the bottom corner black square on the player's left. All play is conducted on the black squares only. The above diagram shows the pieces set up for play. The object of the game is to capture all of the opponent's men, or render them unable to move.

Dr Marion Tinsley: The Greatest Mind Sportsman of them All?

'Chinook has an excellent programmer in Dr Jonathan Schaeffer, but mine is better - God!'

Dr Marion Tinsley, on the occasion of his 1992 match against the Chinook computer.

Dr Marion Tinsley was born in Irontown, Ohio in 1927. He is universally recognised as the premier draughts player in the history of the game. Tinsley was winner of a record seven US National titles and was World Champion from 1955 to 1958, after which he retired to further pursue his teaching career in mathematics, as a professor at Florida State University. Returning to the game in 1970, his 12-year absence seemed to be no obstacle; winning the 1970 US National Titles at Memphis, Tennessee. He became World. Champion once again in 1975, defeating E. Lowder, Don Lafferty and Paul Davis in world title matches, retired again in 1991, and was declared World Champion Emeritus in 1992. Even at age 65, his tremendous analytical abilities were undiminished. Tinsley is the only player ever in the centuries-long history of draughts to remain unbeaten in any match since he first won the world title.

Man vs. Machine: Tinsley vs. 'Chinook'

In 1992 Tinsley faced his greatest ever challenge - a fortygame contest against the 'Chinook' computer at the Park Lane Hotel, London. This historic clash, organised by the co-authors and International Chess Master David Levy, was the first between a human World Champion and a computer program aspirant to the throne, and attracted more widespread media coverage than any other modern draughts contest. The man prevailed in what was arguably the finest high-level draughts match ever played, by the score of four wins to two with 33 draws.

The match featured a dramatic finale, in which Tinsley gained a key and crushing victory in the last game. Chinook, the Canadian computer program, running on a Silicon Graphics parallel series super-computer, had been ordered by its human minder, Dr Jonathan Schaeffer of the University of Alberta, Canada, to play remorselessly for a win in game 39. Trailing by a full point against its human opponent, only two wins for Chinook in the last two games would enable it to win and make history by becoming the first ever computer World Champion in any thinking game. Spurning all chances to draw, Chinook hurled itself into the battle and on the tenth move it introduced an entirely new idea, designed to throw its opponent off course. Dr Tinsley, defending one of the sharpest opening variations in draughts, known as the White Doctor never made an error. He mercilessly refuted Chinock's bold effort, crowning two pieces as kings and forced the machine to resign.

On the 34th move it was all over. Chinock's position was a wreck. Professor Schaeffer resigned on behalf of his creation, conceding both the 39th game and the match. Game 40 did not need to be played. The score was 20 and a half to 18 and a half, an unassailable lead for Dr Tinsley. Amazingly, the man used just half an hour thinking time for this historic game, while Chinook used an hour and a half, during the course of which it saw no less than 270 million different draughts positions, but to no avail.

When Jonathan Schaeffer extended his hand in resignation on behalf of Chinook, Dr Tinsley rose to his feet, raised his fist in triumph over his head and exclaimed to the thrilled audience: 'Three cheers for human beings - and that includes Jonathan.' The final game of the match had the packed hall enthralled as the advantage swung from Chinook's side to Dr Tinsley. After the game was over, Dr Tinsley said that this had been the most exciting match of his entire career. According to the many watching draughts experts, the standard of play was possibly the highest ever seen in a draughts match.

Prior to the match, there were some draughts enthusiasts who felt that the participation of computers in what had, hitherto, been an almost exclusively human activity, was a retrograde step. But the massive publicity created for their game and the enormously exciting atmosphere at the Park Lane Hotel, caused a large number of conversions.

Dr Schaeffer, when asked why the apparently invincible machine had lost said: 'certain holes still need to be plugged in its knowledge of draughts openings. Once this has been done we would like to challenge Dr Tinsley again.' Dr Tinsley responded: 'I am game for a rematch, but not one of 40 games. It must be 20 or 30. Look into my eyes - I am deeply tired. After my loss in game 14 this time I almost did not have the strength to go on.' Dr Tinsley, a devout Christian, said his faith had helped him. In fact, it had also been the source of some worry to him: he had been visibly depressed by a vision of God appearing to him personally in a dream before the championship, in which God had said, 'I love Jonathan too.'

BACKGAMMON

Brief Description



Backgammon is played on a board marked with 24 sawtooth 'points' in two alternating colours and the board is divided into twin 'tables', an inner and outer, by a central partition called the bar. Each side has 15 pieces similar in shape and size to draughts pieces. Dice, thrown alternately, and (if desired) a doubling cube are also required.

The object of the game is to move your men to your inner table and then 'bear' them off. You may not land on points occupied by more than one of your opponent's men. However, if you land on a point occupied by only one of your opponent's men, that man is placed on the bar until your opponent is able to bring it back into play. Players are obliged to return the men on the bar into play before they can move any of their other men.

Historical Development

Origins: The World's Oldest Surviving Game?

There are artefacts from collapsed civilisations with designs suspiciously like the 24 opposed triangular points of a backgammon board. A Greek vase, 2,500 years old, apparently depicts Ajax and Achilles playing a form of backgammon.

How Difficult are they?

The number of possible positions available in different Mind Sports is as follows:

Mind Sport	Possible Positions
Go	10170
Scrabble	10 ¹⁵⁰
Poker	1072
Shogi	1070
Chess	1050
XiangQi	1050
Bridge	1030
Draughts	10 ²⁰
Backgammon	1019



Tony Buzan

Packed hall of spectators at the World Memory Championship



BRIDGE

Brief Description

Bridge involves four players using a standard pack of cards (without jokers). Cards rank A, K ... 2). For the bidding only, suits rank, in descending order, spades, hearts, diamonds and clubs, but a call in no trumps has precedence over spades. Partners are agreed and face each other across the table. Each partnership works as a team but the bids of each partner are binding on both. The aim is to win the most points in play, especially by succeeding in contractual bids and so earning a bonus for winning games and for winning the rubber (best of three games). A slightly different system is used in tournaments, to eliminate luck.

Historical Development Origins: The Father of Bridge

Harold Vanderbilt (1884-1970) known as the 'Commodore', had many distinctions. He was born into the richest and most famous American family of the times and lived a life cushioned by the fortunes of the family railroad business. He successfully defended the America's Cup three times and his revision of the right-of-way rules for sailing vessels are still known as the Vanderbilt Rules.

But his lasting fame derives from an experiment conducted in 1925 while cruising from Los Angeles to Havana via the Panama Canal. Together with three friends he tinkered with the rules of the two most currently fashionable card games of the whist family, known as auction bridge and plafond. Whist-type games had been played for 400 years or more, and had experienced several refinements in a slow evolution. What Vanderbilt did was alter the scoring in two critical details, by the introduction of slam bonuses and of the concept of vulnerability. He called his new version contract bridge and with only one very minor change in the 70 years that have passed since then, his is the version now played throughout the world and known simply as bridge.

WHO IS THE ALL-TIME GREATEST MIND SPORTS CHAMPION?

The automatic answer to this question would be Garry Kasparov, undisputed World Chess Champion for 15 years, international media personality and multi-millionaire. However, Kasparov somewhat blotted his copybook by losing a six-game challenge match, in May 1997, to IBM's Deep Blue computer. Meanwhile, draughts champion Dr Marion Tinsley made such a huge impression during his match in London against the Chinook program in 1992, that this question is definitely worth asking. For example, the. implacable Dr Tinsley, aged 65, played four games a day (totalling nine hours), six days a week with only one rest day over a 39-game match.

Spectacularly, in so doing, Dr Tinsley turned the 'Turing Test' on its head. The Turing Test, famously, posits that if experts cannot distinguish between human and computer output in certain areas, then the machine is said to be 'thinking'. When analysts were poring over the 39 games played, they found to their surprise, that not knowing whether the human or the computer was playing black or white, they consistently concluded that the mistake-prone, relatively non-elegant moves played by the computer were those played by Dr Tinsley, while the magnificently immaculate moves played by Dr Tinsley were, in fact, by the computer. This provides a fascinating insight into how the human brain still underestimates itself and inappropriately overestimates silicon intelligence when the evidence is quite demonstrably to the contrary.

When seeking to answer the enthralling question, who is the greatest Mind Sports champion of all-time, a number of

significant factors must be taken into account. Before we enumerate the critical criteria for establishing the greatest Mind Sportsman of all-time, we must be certain that we have selected the leading candidates from the major Mind Sports. Apart from Kasparov and Dr Tinsley the following five grand champions in their sphere should be considered:

Oyama Yasuharu

Oyama Yasuharu totally dominated the game of shogi for a twenty-year period from the early 1950's to the early 1970's. He won 80 titles, overwhelminglythe largest number ever, and was still a title challenger in 1989 at the the age of 66. He was created 15th lifetime Meijin1 (or grand champion) in 1976 and died in 1992 at the age of 69. This was in his 45th consecutive season as either an: A class player or as Meijin. In chess, this would be the equivalent of being World Champion, or a World Championship candidate, for 45 years. Additionally, he holds the record for the greatest number of games played in a career, 2,214 and the most career wins, 1,433.

Go Seigen

Go Seigen was the strongest player in the oriental game of go from 1940 to 1955. Born in Fukien Province, China, he emigrated to Japan and vanquished all the Japanese Grand Champions in a series of set matches. Go experts regard him as the greatest genius in the history of their game. Go Seigen achieved one of the dreams of all Mind Sports champions, in that he defeated every major opponent who confronted him on even terms. This forced them into a situation where they could only hope to compete against him with a chance of success while being given odds. Not just a great player, he was also a revolutionary theorist of the openings, developing the New Fuseki, which completely overturned conventional theory in go during the 1930's.

Hu RongHua

Hu RongHua won the XiangQi Championship for the first time in 1960 aged 15, thus creating the record for the youngest ever champion in that Mind Sport. In 1985, at the age of 40, he added the record for becoming the oldest champion too! Absolutely the greatest player of Chinese chess of all-time, Hu RongHua logged an unprecedented sequence of ten consecutive victories in the championship during his dominant years. The best Chinese chess players come exclusively from mainland China, and the Chinese National Championship may safely be considered as equivalent to the World Championship.

Ely Culbertson

Contract bridge was invented in 1925, but within the space of a mere six years bridge fever had swept America. The extraordinary and immediate growth of the game was largely due to Culbertson, one of the strangest and most flamboyant characters ever known in the games-playing world. In 1929 he founded the magazine The Bridge World, which is still a leading authority. His many textbooks became best-sellers and he commanded an amazing \$10,000 a week for radio broadcasts on the game. In 1930 he led an American team to England to play the first ever international match. Culbertson won the 'Bridge Battle of the Century' in a 75-hour contest against Sidney Lenz in 1931. This success made Culbertson a dollar millionaire three times over. He went on to establish a sort of private fiefdom over bridge, which has never been equalled. Culbertson, like Kasparov, transformed success at his chosen Mind Sport into giant personal wealth. He lived on a private estate in a 45-room house, with several miles of parks, lighted roads, greenhouses, cottages, lakes and an enclosed swimming pool. He always had caviar for tea!

Dominic O'Brien

Dominic O'Brien is the overwhelmingly dominant force in the Mind Sport of memory testing and performance. He has been joint winner of the Brain of the Year title, awarded by the Brain Trust Charity, and has won the World Memory Championship on three occasions. O'Brien can number amongst his feats an ability to memorise 780 shuffled cards in just one hour, a single shuffled pack in under 40 seconds and a 1,000-digit random number in 60 minutes.

Now we enumerate the criteria for awarding the ultimate laurels.

Criteria for establishing Dominance in Mind Sports.

- 1 The number of players playing the particular game.
- 2 The strength of the top players.
- 3 The complexity of the game.
- 4 The record of the player in question.
- 5 The duration of time at the top.
- 6 The opinions of those who are the champions' closest rivals

In spite of their superlative achievements, none of Hu RongHua, Culbertson, Oyama Y asuharu or Go Seigen ever faced the test of extended battle against a giant, tireless number-crunching computer, as Kasparov and Tinsley did. While, in Dominic O'Brien's chosen sphere of memory challenge, contests against a computer would simply be inappropriate. We must therefore narrow the field down to Kasparov and Dr Tinsley.

When assessing the relative claims of Kasparov and Dr Tinsley it should be noticed that there are more draughts players in the world (700 million) than there are chess players (600 million). However, there is a distinctly higher number of top chess players, and chess certainly has the lead in terms of the quantity of young players taking up the game as a profession. As to the relative complexity of chess and draughts, chess according to our research, has 11 skill levels, while draughts has 8, a clear lead to chess. Kasparov has dominated chess as no other player ever has, and has continually put his title on the line to challengers, but Dr Tinsley essentially maintained himself at the top, dominating all aspects of the game, including knowledge, opening, middlegame and endgame theory, brilliance, creativity, speed and marathon playing for a total of 43 years. If Kasparov had ambitions to duplicate Tinsley's span as the undisputed top player, he would have had to stay World Champion until the year 2028, and he would have had to improve his record against the world's best computers!

The reigning World Chess Champion Magnus Carlsen from Norway, has already exceeded Kasparov's rating, but has only held the title for a mere 7 years.

PUZZLES AND CHALLENGES

In this chapter we choose challenging mental exercises for you, covering key areas of this book. The puzzles include draughts positions selected by Dr Marion Tinsley, chess problems based on games by Garry Kasparov, Deep Blue, Judit Polgar, the world's strongest female chessplayer. Finally, test your IQ in comparison with Garry Kasparov.

Draughts

(White is playing up the board in both cases)



Chess



1. White to play: This position is a variation from the sixth game of the Kasparov-Deep Blue match, 1997. Kasparov had already resigned. What was the conclusion that he foresaw?



2. White to play: Here is a variation from Bacrot-Anic, Enghien 1997 which helped Bacrot to his grandmaster title. How does White force a quick mate?



3. White to play: This position is from the game J.Polgar-Hansen, Vejstrup 1989. Judit found a way to force a quick checkmate. Can you see the winning continuation?



4. White to play: This position is a variation the first game of the Kasparov-Deep Blue match, 1997. How does White exploit his open attacking lines?

How High is your IQ?

The following test allows you to compare your IQ with that of former World Chess Champion Garry Kasparov. The ten questions are based on a test he took.

 Which is the odd one out? Salmon, whale, shark, trout, pike 										
2.	Inser 6	t the t 9	wo mi 18	0	numbe 42	rs: 45	??	??		
3.	. Which is the odd one out? Venus, Saturn, Hermes, Pluto, Uranus									
4.	4. Choose the word to complete the sentence: Hearing is to acoustics as seeing is to ????????									
5.	Com 3	plete t 5		v of n 13	umbers 22					
6.	6. Who is the odd one out? Haydn, Mahler, Aristotle, Brahms, Stravinsky									
7. Which is the odd one out? Paris, Washington, Oslo, Cairo, Bombay, Rio de Janeiro, Berlin										
8. Which is the odd number out? 625 361 256 197 144										
9. Insert the missing letter: B E ? Q Z										
10	0. Con 4 7	6	the fo 9 15	13	ng num	ber sequ	ence:			

Draughts Solutions

- White wins with

 f4-g5 f6xh4 2 h2-g3 h4xf2 3 g1xe3xc5xe7.
- 2. White wins with 1 f 4-e5 d6xf 4 2 e3xg5 h6xf4 3 c1xe3xg5.

Chess Solutions

- 1. White gives immediate checkmate with 1 Qa6.
- 2. White checkmates with 1 Qxh7+ Kxh7 2 Rh3+ Kg7 3 Bh6+ Kh7 4 Bf8 checkmate.
- 3. White forces checkmate with 1 Qg7 + Kxg7 2 Rfxf7 + Kg8 3 Rg7 + Kh8 4 Rh7 + Kg8 5 Rbg7 checkmate.
- 4. White wins with 1 Qd2 attacking the black bishop on e2 and planning to create insoluble problems for Black with 2 Qc3.

IQ Test Solutions

- 1. Whale. The whale is the only mammal.
- 2. 90, 93. The numbers alternately increase by 3 or double.
- 3. Hermes. All the others are planets in the solar system.
- 4. Optics. Acoustics is the science of sound, optics of light.
- 5. 39. Each subsequent number is obtained by doubling the previous one and then subtracting a number which increments by one each time (e.g. 3x2 - 1 = 5; 5x2 - 2 = 8; 8x2 - 3 = 13 etc.)
- 6. Aristotle. All the others are composers.
- 7. Rio de Janeiro. Rio is in the southern hemisphere. All the others are in the northern hemisphere.
- 8. 197. All the other numbers are perfect squares.
- J. If the letters are replaced by their position in the alphabet, we get the sequence 2, 5, 10, 17, 26. Each of these numbers is a square number plus one.

10. 22. The upper row numbers increment by 2, 3 and 4. The lower row by 3, 5 and 7.

Now check your score against the following chart:

Correct answers:	1	2	3	4	5	6	7	8	9	10
IQ rating:	82	90	98	106	115	124	133	142	151	160+

Scoring 100 is average, while 130 is in the genius range. Kasparov took a similar test and registered an IQ of 135.

Mind Mapping

The Calming Attention of Mind Mapping

"'Mind Mapping' originally invented by the brilliant learning expert Tony Buzan... to create one of the most comprehensive and enjoyable learning tools available."

Paul McKenna, I Can Make You Smarter (Bantam Press, 2012).

Hello. My name is Tony Buzan and I invented Mind Maps and the process of Mind Mapping back in the 1950s. Mind Mapping offers a calming and colourful way of

- absorbing information
- thinking and learning
- making creative connections
- improving and making more successful your life

Mind Mapping taps into - and mimics - the way your brainwaves respond. Your mind thinks in COLOUR and PICTURES, not in black and white lines

filled with words.

When you recall something what 'springs to mind' first? Exactly:



The vibrant visual display that is a Mind Map. This one highlights the essential features required to create this brain-friendly thinking tool. A Mind Map doesn't just help you 'see things differently', it opens up the possibilities of asking yourself "what makes me the person 1 an?" and "how can 1 stretch my potential? Gee Chapter 1 on how to create your own Mind Map).

Mind Mapping takes a core idea, thought, problem, question, [what? when? where? who? why?] and then opens up your brain's connective pathways so you see the whole picture- so you see how that idea, that piece of information, links to whatever you are learning, studying, researching, or brainstorming-enabling you to make wonderful creative leaps. For idea-generation and problem-solving, Mind Mapping is mentally refreshing and emotionally encouraging.

Mind Mapping is also a well-established tool for anyone with reading (and therefore learning) difficulties -it has therapeutic and mind-calming values.

The Calming Attention of Meditation

For those who have picked up this book and are intrigued to see how this learning tool can help you on the path to Mindfulness, let me explain: meditation is a way of balancing our inner world of emotions, hopes, and desires, to the outside world as we find it. It's a spiritual exploration of the mind that guides us to being connected and interconnected with a kinder, more perceptive, less judgemental attitude to life.

I invented Mind Mapping as a brain-friendly tool for memory, and then realized that it was for far more-to help us connect to this Mindful state and to steer a caring and creative course to self-awareness, self-compassion and self-confidence.

If I could distil what this section is about in a few words, I would say it is about tapping into a feeling of calm, stillness and ultimately happiness. It is about re-discovering, through Mind Mapping, that sense of stillness against all those distractions that are meant to make our world easier yet have taken over our lives-and now even 'think for us'! It's about stripping away all the ceaseless noise, and appreciating oneself, one's family and friends and cherishing those things closest to us ... closest to our hearts and minds.

When did you last slow down and stop and spend a few uninterrupted minutes just focusing your attention in a particular way? For example, gazing at the horizon: perhaps a modern urban skyline, or an open sea, or a line of rolling hills in the distance, a sunset, or a harvest moon? Have you ever stopped to study a flower in all its details? Or listened to your breathing by simply focusing on your own breath as you inhale and exhale? When did you last turn your 'smart' phone off, unplug your personal stereo, and just looked ahead or even closed your eyes (instead of looking down at your smart screen) and say 'wow'? Perhaps reflecting on an object or experience or memory. Or perhaps just being in the present? When did you last do anything without an agenda?

Through Mind Mapping, which brings focus and enquiry together, I want to show you how to re-connect with being in the moment. Mind Mapping is an ultimate springboard for opening up the meditative process. You can Mind Map to help you gather your thoughts and feel a sense of calmness and 'quality' in every little thing you do. Add the much under-rated practices of doodling and daydreaming which I champion in this book too-and I will show you how Mind Mapping for Meditation will lead you to a happier way of being when you use them in your daily life.

Through the following pages of Mind Mapping for Mindfulness you can begin to re-connect with a more peaceful, restful, reflective, joyful inner you, and re-discover the wonder of nature as it lives and breathes around and within You.

Tony Buzan 2018

What is a Mind Map?

Mind Maps De-mystified

I originated the concept of Mind Maps in the late 1950s and it has helped thousands of millions of people around the world whenever they wish to maximise the efficient use of their brain power. A Mind Map is a powerful graphic technique that provides a universal key to unlocking the potential of the brain. It harnesses the full range of cortical skills

- word, image, number, logic, rhythm, colour and spatial awareness

- in a single, uniquely powerful manner. In so doing, it gives you the freedom to roam the infinite expanses of your brain. The Mind Map can be applied to every aspect of life where improved learning and clearer thinking will enhance human performance.





Global Mind Mapping

My Mind Mapping model is now used around the world by schools and colleges, companies and organizations and by governments including Thailand, Singapore, China, Mexico, India and Dubai where innovative teaching ideas are very welcome, and learning has really taken off. Prime Minister of India, Narendra Modi is guiding his 1.3 billion people on social media and in his book Exam Warriors (Penguin, 2018) to be fully mindful, practise yoga and to Mind Map. I have witnessed first-hand the transformation of so many school children who thought, because they had learnt in a linear fashion, that they were stupid because they failed traditional creativity tests-once they had the opportunity to Mind Map these kids started to write: "I'm smart, I'm smart".

The Essentials of a Mind Map

Here is my quick and easy guide to get you started on this revolutionary concept.

• Start to draw in the centre of a blank, unlined page of paper, with an image of the desired topic, using at least three colours.

• Use images, symbols, codes and dimension throughout your Mind Map.

• Select key words and print - using capital and lower case letters.

• Each word/image needs to be supported on its own branch.

• The branches must be connected, starting from the central image. From the centre, the branches start thicker, organic and flowing, tapering and becoming thinner as they radiate further outwards.

• Make the branches the same length as the word/image.



These are the children of the future --through Mind Mapping, they see the universes of their minds. 1,600 schoolchildren helped create the (then) world's largest Mind 3 storeys high by 4 storeys wide.



This Mind Map depicts Singapore's history, pays tribute to Singapore's "Thinking Schools, Learning Nation" success and to the powers and wonders of the mind. The central image is the national flag from which 7 branches extend: 'Nation' (coloured brown); 'Origin' (coloured blue); 'Lifestyle' (coloured green); 'Industries' (coloured purple); 'People' (coloured red); 'Aspirations' (coloured blue); and 'Achievements' (coloured yellow).

• Use colours - as your own code - throughout the Mind Map.

• Emphasise elements of your Mind Map using size, dimension and colour to improve your Memory, Understanding and Learning.

• All brains use Association as a major principle of mental function. The radiant nature of the Mind Map automatically incorporates this principle. Showing associations between different related branches, you can use arrows and codes.

• Numbering your branches in your Mind Map, helps you organise, structure, clarify, and prioritise your thoughts.

• Incorporating the Laws of Mind Mapping gives you more opportunities to develop your own personal style of Mind Mapping.

Creating a Mind Map - A Happy Example

• Place a large white sheet of paper horizontally.

• Gather a selection of coloured pens, ranging from thin nib to highlighter.

• Select the topic or task to be Mind Mapped. This will be the basis of your central image ('what makes you happy' for example) .

• Gather any materials, research or additional information that is needed, so that you have all the facts at your fingertips.

• Start drawing in the centre of the page with a colourful and memorable image.

• Use dimension, expression and at least three colours in the central image in order to attract attention and aid memory.

• Make the branches closest to the centre thick, attached to the image, and radiate from the centre in an

organic fashion.

• Place the Basic Ordering Ideas (BOI's) or chapter headings on those branches.

• Draw thinner branches off the end of the appropriate BOI in order to hold supporting data.

• Use images wherever you find it is possible.

• The image or word should always sit on a branch of the same approximate length.

• Use different colours, as your own special code, to show people, places, topics, themes, and dates.

• Capture all your ideas, or those that others have contributed, to edit, reorganise, make more beautiful, elaborate, and clarify the Mind Map.

• All of the above makes the Mind Map more attractive visually, thus reflecting the clarity, excellence and beauty of your thinking

Benefits of Mind Maps

Similarly to a road map, a Mind Map will:

- Give you an overview of a large subject/area.
- Enable you to plan routes/make choices.

• Let you know where you are going, and where you have been.

• Gather and hold large amounts of data.

• Encourage daydreaming and problem solving by looking for creative pathways.

• Give you pleasure to read, muse about and remember on whatever you have worked and played.

Mind Mapping is excellent for

1. Learning: Reduce those 'tons of work'. Feel good about study, review and exams. Develop confidence in your



ABOVE: Ray Keene managed to lose two and a half stone (16kg) following this Mind Map for losing weight.






learning abilities. Become an Exam Warrior and guarantee your success.

2. Overviewing: See the whole picture, the global overview, becoming instantly clear on one page. Understand the links and connections.

3. Concentrating: Focus on the task for better results.

4. Memorising: Easy recall. 'See' the information in your mind's eye.



Mikiko Chikada Kawase frequently refers to her Life Balance Mind Map as it helps her 'not to lose sight of my life goals even during the very hectic hours and day'.

5. Organising: Parties, holidays, projects and planning. Make it make sense to you.

6. Presenting: Speeches become clear, relaxed and alive. You can be entertaining, flexible, and free. 7. Communicating: Communicate in all forms with clarity, conciseness and mindful consciousness.

8. Meetings: From the planning to the agenda, chairing, or taking the minutes ... these tasks can be completed with speed and efficiency.

9. Training: From preparation though presentation to celebratory graduation, make the job easier.

10. Stress Reduction: Get clarity on the necessary, and eliminate stress.

If You Are New To Mind Mapping

Now Try Your First Mind Map

You are now going to draw your first Mind Map; let's start with 'HAPPINESS', as we have used this as our first example, and as this topic is one of the main aims of meditation-to feel HAPPIER about yourself, and how you see yourself in your mind's eye and indeed reflected in a mirror. You often hear the phrase 'I'm not happy with what I see and I find it hard to get past that, let alone be Mindful!' Before you start, stand in front of a mirror and pay yourself a compliment 'Here's looking at you, kid!'. Feel good about yourself and you will usually feel that you look good too!

As you start your Mind Map about happiness, bring in all the associations about what makes you happy. Download your brain and let your thoughts cascade!

Remember, with Mind Mapping, you gather your thought processes and outpour them on paper or screen in a naturally visual, brain friendly display. You use colour, graphics, and images to encourage the hooking of ideas as you explore your thoughts and commit the results to your long-term memory. It is a world away from black and white blocks of lumpen text: your mind does not 'think' that way and neither does the Mind Map.



Always start with a central image and use different colours. Then draw your main (or first level) branches.



Now add other images and single key words along the length of the branches e.g. 'reading', 'sunshine', 'swimming', 'exercise', 'walking', 'love' or whatever it is that makes you 'happy'. Add further branches as you make new connections and associations.

Mind Mapping is a highly personal and idiosyncratic activity where your thoughts can reach out in any direction. Once you have the hang of Mind Mapping, you can develop your own distinctive style to make your Mind Maps even more meaningful.

Having Mind Mapped all your thoughts about 'Happiness' -study the Mind Map and see the whole picture. It will become your best ever selfie!

What Is Mindfulness?

"Much of (the Mind Map's) usefulness comes from the Mindfulness necessary to create 'the Map'. Unlike standard note-taking, you can't Mind Map on autopilot."

Joshuo Foer, author of 'Moonwalking with Einstein: The Art and Science of Remembering Everything'

Throughout human history, the human brain has always related to the universe and the environment. The first nomads, the aborigines in the deserts and in the plains, the forests and the jungles, had all their senses operating: they could see, hear, touch, smell, feel, taste. They were truly kinaesthetic (which means they were 'at one' with all their natural sensations). Their minds were full of the gifts from nature and the universe.

These primeval humans were 'Mind-Full'.

They observed the relationship between the things they saw and felt and heard and smelled, the spatial relationship and how that geometrically and mathematically fitted in to what was going on inside their heads. And what was going on inside their heads, their minds, their neurological pathways, was not black, not white, not male, not female: it was pure Human. The pure human was and is fantastically brilliant. Fast-forward a hundred thousand years, and look at the baby gurgling in its cot. A baby is the epitome of the ultimate scientist: a baby tries to touch and to feel everything; it stares at everything; it wants to taste everything, it wants to experiment. Why? Because every baby wants to fill its mind with all this information transformed into knowledge. The idea of Mindfulness is an apt description of the brain wanting to be full of the sensations of light, sound and touch. Watch a crawling baby reaching out, reacting, sensing, delighting in the senses; it is an example of Mindfulness-in-Action.

Mindful Meditation

Put Your Mobile Down! Put Your Camera Momentarily Away! Put your Scattered Thoughts away, Laser Your Focus on This Wonderful Object, This Beautiful Subject, Using the Mindful Thinking Tool, The Mind Map. Create Your Super Selfie!



Meditation - From Now and Zen

When walking just walk, When sitting just sit, Above all, don't wobble. Zen Master Umon (d.949)

Mindfulness is a contemporary Western re-branding of the ancient Zen philosophy of the East which, in a nutshell, said: 'To practise Zen is to discover one's true nature'. At its core is quiet meditation and 'Zen' translates in Japanese (the country with which we most associate modern-day Zen practice) as 'meditation'. That meditation can take you on the path to 'revelation', 'enlightenment', and a rich sense of awareness.

Zen evolved from Buddhism-the Eastern faith with its deepest roots in India-based on the example and teachings of the Buddha (c. BC 563-483). Some 350 million followers call themselves 'Buddhists'. The communal faith of the Buddhist community, or sangha, gravitates around rituals, chantings, and the study of sacred scripts.

Zen evolved in Eastern monasteries offering a simple direct approach primarily through sitting meditation (za-zen) and focusing the mind on koans-parable-style stories and cryptic statements historically passed on between Zen masters and monks.

Its contemporary appeal is that you don't need to be a Zen master or monk to practise the way of Zen. The Zen tradition is a universal one: anyone may practise it, independent of creed. All you really need to start with is a willingness to be a complete novice with a 'beginner's mind'.

"If your mind is empty, it is always ready for anything; it is open to anything. In the beginner's mind there are many possibilities; in the expert's mind there are few."

Shunryu Suzuki Zen Mind, Beginner's Mind

Being in the Moment

We go through great chunks of our day switched on to autopilot; life often feels like a series of 'routines' and life becomes a routine. We don't even think about it. We cruise along, paying little attention to our surroundings and our life.



The gentle water ripples made by koi carp are a perfect study in and for meditation. The fish is a popular symbol of ancient Buddhism and I see them as 'Agents of Meditation / Spearheads of Tranquillity / Providers of Calm / Leading Imaginations (see my Mindful Meditation pp p73-75).

Our thoughts are often dragged back to the past, or rushing forward about something happening later in the day, which means we very rarely have any awareness of what's occurring in the present moment. This is having a 'rattled thinking mind' (that is: remembering, projecting, worrying).

The present moment can be rewarding, refreshing, even lifechanging. This idea of being in the present informs my Mind Maps, and needs to be seized, grasped, shaken and stirred for its sheer vitality. It's about having a 'being mind'.



Distracted thoughts, feelings, sensations, and impulses feed into your frame of mind and become habitual. You can re-frame your state-of-mind by Mind Mapping, and make sense of the chaos going on. Re-gain your brain!

Are you on autopilot? Or are you making conscious choices? Are you doing things out of habit or are you consciously aware of what you are doing? Are you looking backwards and forwards all the time?

(In other words, avoiding the present?) Are you able to sense what's around you? Are you in touch with your sensesseeing, hearing, touching, smelling, tasting? Are you overwhelmed by thoughts? How do you react to thoughts? They may be real to you but they are not necessarily the 'truth' - they are simply mental events, often useful but not 'you'. If your thoughts dominate you, then you are not in control of your thoughts. You need to be. Do you daydream and can you make your daydreams come true?

Being creatures of habit is not in itself a bad thing, since much of what we do in our daily routine we can do on automatic pilot (brushing our teeth, buying a cup of coffee, showering, commuting or dropping off the kids at school, walking the dog).

It's a matter of balance and being able to switch from a Thinking Mind to a Being Mind. Through Mind Mapping, you can break the mould of what you habitually do day-in and day-out, and enable yourself to switch off your automatic pilot and become a Conscious Pilot. A 'Mindful' Pilot.

Mindful Meditation

One of the Great Gifts You Can Give Yourself Is the Present Of Your Presence

Mindfulness Exercises

Here is a simple exercise to help you pay attention in a different way to what you do normally, in the simple act of sitting and walking (which, let's face it, takes up much of our day!). This will give you (literally) a feel for what's going on around you in the moment, and will increase your sense

of awareness. It is not about paying more attention; it is about changing how you pay attention.

Exercise 1: Being Still (5 Minutes)

Find somewhere where you won't be distracted or interrupted by phone, tablet, mail, or doorbells.

1. Choose a high-backed chair and sit upright with your feet planted firmly on the floor.

2. Sit 'comfortably' without effort: have your left hand palm-down on your left thigh and right hand palm-down on your right thigh; or place your hands turned palm-upwards resting on your lap or alternatively, if you have the space and feel inclined, sit crosslegged on the floor; put a cushion or pillow behind your bum to help you keep upright.

3. Rest gently and just let your thoughts flow; just sit there watching and listening keenly; relax into it - don't put any effort into this-there is no agenda to get done here. Close your eyes if that feels 'better'.

4. Notice the coming and going of your breath (nothing more) that it as much as you need to do to direct your attention.

5. Just be content to spend 5 minutes Just Being. Here is a zen koan that can help you in your contemplation-swirl it around in your mind.

This exercise helps you rediscover 'me time', finding inner calm and being kind to yourself. You are rediscovering that sometimes it's nice just to be still with nowhere to go and nothing to do. If you can remain unoccupied for 5 minutes you have recharged your brain's batteries and will feel relaxed, renewed and even re-energised/refreshed.



Being still, consider this ancient Zen haiku: "Sitting quietly, doing nothing, Spring comes, and the grass grows by itself."

After the exercise draw a Mind Map recalling your feelings and sensations as you went through the process. For example, how did you feel about the quiet? How did your breathing feel? Did this experience feel different? If so, how? Did your mind flit away during the exercise? Several times? Did you have no-mind?

Mindful Walking

Walking is good exercise for the body-and for the mind. Whether you are walking to work, the bus stop, the shops, you will invariably do it on automatic. You may even have



headphones on listening to music or the radio or even an audio book.

It's ironic that the most 'pedestrian' form of locomotion is the one that most frees the mind and the spirit. Walking keeps you younger, fitter and helps you weight wise. It has superb mental health benefits.

Walk afresh, as if for the first time. See things afresh, hear things afresh, smell things afresh, feel things afresh (your feet on the pavement or path) and feel the interconnectedness of everything. This exercise will show you how walking is perfectly streamlined for Mindfulness: it is meditative in its own right.

Exercise 2: Walk the Walk

1. Establish a walking rhythm, however slow you want to go, and keep that rhythm.

2. Inhale through your nostrils and slowly exhale through your mouth or vice versa.

3. Absorb the sights, sounds and smells as you continue your walk. Notice the contours of the buildings or the dappled light on tree branches, or whatever catches your senses. Listen to the sound of your feet on the ground, perhaps the rhythmical crunch on gravel or sole on pavement.

4. Can you feel yourself in the present rather than just having random thoughts? Every step, movement and rhythm is now part of being in the moment.

5. Be aware of being part of this wonderful world. Feel good about yourself. Walking can help you release worries, shake off moods and return to the 'here and now' rather than the 'then and there' and re-capture a present-moment awareness.

6. If you start with a heavy heart, a bundle of nerves, an obsessive worry, lack of sleep, give it 30 minutes of one-foot-following another over pavements, pedestrian crossings, to pathways in parks and rough tracks in woodland, and you will feel good about yourself and be in a Mindful frame of mind.

Mindful Meditation

Solvitas Perambulum; Find Solutions to All Problems While Walking



This image holds just as true today as when I created it many many years ago.

Walk Afresh Always as if for the First Time. See Things Afresh Hear Things Afresh Smell Things Afresh Feel Things Afresh While Feeling the Interconnectedness of Everything. Walking Becomes Your Mobile Meditative Streamlined Mindfulness. Perambulation is the Problem Panacea.

Mind Map Your Walk

After your walk, Mind Map it! Add branches and subbranches to focus your awareness on the details of the experience as it just happened: how did your body feel in detail during the session?

Add a branch each for 'thoughts', sensations', 'moods/feelings' with sub-branches. What thoughts went through your mind? i.e. 'I hadn't noticed that before even though it was such a small thing'.

Add '+'s and '-'s depending on how you viewed the session in a positive or negative light: Remember that when you do this practice you may find it enjoyable or you may not. It is valuable either way.

Keep a Mind Map journal/record/log of your practice sessions so that you can revisit and compare experiences.

It's Just A Breath Away

Mindful Meditation

Your Breath is the Shepherd Which Shepherds the Sheep Of Your Scattering Thoughts And Shepherding Them To the Corral of Your Connected Thoughts. The Corral Will Be Full of Connected Thoughts, Collected into the Corral of Mindfulness.

Now it's time to discover the best way to achieve 'allinspiring' awareness time and again, and that is by focusing on your breath.

Of course breathing in and out is something we do on autopilot 32,000 times a day on average. Yet you never



Find a position that's comfortable and supportive for you.

constantly focus on it or 'feel' it as a sensation, do you? There are times when we are aware of breathing, swimming underwater or sneezing violently, or after a session of strong physical exercise when we stop to catch our breath and get back to a normal breathing/heart rate.

Focusing on the breath is the key anchor to Mindful Awareness: it sounds so simple yet simple can be difficult for distracted minds, so be kind to yourself along the path to self-awareness.

The following meditation will also help you see clearly how the mind wanders off by itself. There is no right or wrong in this: it is what it is as your mind wanders. It is about 'being kind' to yourself, and not berating yourself if the 'monkey mind chattering' takes over. You have simply slipped into 'chattering thinking (i.e. preoccupied) mind'. By focusing on the direct experience of 'sensing' your breath you will be able to come back to the 'knowing' mind. Nothing provides as complete a focus as that of the rise and fall of our breathing.

• Set aside 20 to 30 minutes for this exercise

• Find an ideal place to practise: somewhere in your home or garden where you can have some peace and quietand switch off, turn off, your mobile, radio, tablet and any other possible interferences.

• Wear something loose and comfortable or at least not constricting.

Exercise 3: Follow The Breath

1. Settle down to lie on the floor with a cushion or soft mat (don't use the bed). Or if you want you can sit upright on a stool, or chair firmly supported: you are not slouching (because you are going to meditate, hopefully not fall asleep). If you are sitting on a cushion try to get your knees to touch the floor. If lying down, keep your legs uncrossed and your arms resting palm upward and slightly away from the body.

2. You can close your eyes or lower your gaze and relax (whichever works for you). Start to become aware of the physical sensations going on in your body-can you feel where your body touches the floor or cushion? Can you feel tingling, heaviness, lightness, itchiness, warmth or coolness, pulsing pressures, tensions, stillness?

3. Bring awareness to your breath and, breathing in and out through your mouth or in through your nose and out through your mouthfeel the rise and fall of your abdomen. Notice your in-breaths; and out-breaths. Sink a little deeper on each out-breath. You might want to add numbers such as "breathing-in 1" or "breathing out 1" or just say "inhaling" and "exhaling".

4. Notice where your breath is most prominent as it comes in and goes out, breath by breath: is it in your mouth or nostrils, chest or abdomen? Listen to your breathing in and out via your mouth or nose. Be aware of your breathing as if for the first time. Use each breath as an anchor to be right here, right now. Listening to the sound of your breathing can also anchor your attention.

How are you feeling? Are you aware of your body's sensations? Is it curious that you are noticing your body like this (perhaps) for the first time? Or maybe not: if you have no sensations that's fine too. Stay settled for a few minutes. Notice now how your whole body expands when your breath in and contracts when your breath out-how it is all interconnected. Welcome this sensation and feel good about yourself: that you've taken some 'me time' to explore yourself and to allow yourself to experience how each part feels, without trying to change anything, without being anxiously judgemental.

Focusing on direct experience which makes it less likely you will be carried away by thought. Inevitably during this breathing meditation your mind will wander. Let it. Like a kite darting about in the air, you may suddenly notice you are thinking about something else so that your awareness is no longer on the breath. Say 'okay'; you have 'woken up' and now take your mind back to the sensations of in breath and out breath

Exercise 4: Breathing-and-Body-Scan

Now lets bring breathing and awareness to different parts of



If sitting or kneeling doesn't work for you, try lying down on your side.

your body. Inhaling and exhaling provides the perfect anchor in the 'here and now': you cannot focus on a breath that has already happened a few minutes ago or is going to happen later.

• You can do the breathing-and-body-scan sitting or lying down

• Allow 15 to 20 minutes

1. Bring awareness to your breath as you inhale and exhale.

2. After you've established a regular breathing pattern, direct attention to where your bottom makes contact with the seat or floor-sense the contact or pressure there.

3. Now sense the breath rising up the back, the chest and ribcage opening, shoulders softening, allowing the chin to drop slightly and allowing a little lengthening at the back of the neck.

4. Bring awareness to the changing sensations in your belly as you breathe in and exhale. Notice the slight stretching in your abdomen as you breath in, and the sensations of gentle release with each out breath.

5. Breathe in and imagine the air entering your lungs and passing through your body, down your legs into both feet, and all the way to your toes. On the out breath imagine the breath sinking to the bottom of your feet and then toes. You may notice sensations like the tingling or the hairs on your legs rising or brushing, or you may feel nothing at all.

6. Shift your focus to your armpits, upper arms, elbows and on to your wrists. Again, choose where you want to stop travelling, and focus awareness. Feel aware of both hands while you flex the fingers and thumb and palm and back of your hands..

7. Continue your scan upwards to your neck, face (the jaws, lips, nose and nostrils, mouth cheeks, ears, eyes, forehead) and finally your entire head.

As with the earlier exercises, this breathing-and-body-scan exercise helps you explore the difference between thinking about a sensation and experiencing it. We spend so much time living inside our heads that we have forgotten what it is to feel the world through direct experience, through the senses. Bringing awareness to your breath puts you directly in touch with your body and its sensations without judging or analysing what you find.

"Breath is the bridge which connects life to consciousness, which unites your body to your thoughts. Whenever your mind becomes scattered, use your breath as the means to take hold of your mind again." [Zen Master, Thich Nhat Hanh]

Exercise 5: Alternate Nostril Breathing

This is a simple exercise to feel calmer and more focused. Hillary Clinton used it after her presidential campaign. She



says it helped her cope with defeat: "*it may sound silly but it works for me*".

1. Sit comfortably on a high-backed chair or crossed-legged on the floor.

2. Place your left hand on your thigh and your right hand on your nose.

3. Inhale and exhale deeply from your abdomen.

4. Place your right thumb on your right nostril and your ring and little fingers on your left nostril.

5. Shut your eyes and close off your right nostril breathing slowly and deeply through your left.

- 6. Now close both sides [nostrils] and hold your breath.
- 7. Exhale through the right nostril.

8. Now reverse it: inhale through the right, close it, and exhale through the left (vice versa).

Breathe in and out completing the cycle a few times. This breathing exercise allows oxygen to activate both hemispheres of the brain and therefore all your cognitive skills.





Exercise 6: Mind Map Your Mind's 10 Most Helpful Thoughts.

To help liberate the mind and harness your stream of consciousness into a creative flow, why not do a Mind Map of your 'Top 10' personally positive and helpful thoughts which will help you create a positive memory spiral. Below is a hand-drawn example to get you going (which happens to include: love your pets, bring colour to your life, commit to doing at least one daily Mind Map, reconcile breaches with family and friends, study art, become more spiritual, learn from the geniuses, become healthier, improve your memory and save time by learning speed reading.

The Top Ten Mind Map A collaboration between Tony Buzan and Ray Keene



Exercise 7: Mind Map your Breathing Exercises

Create a Mind Map to record your breathing exercises.

1. Start with a drawing of your prone body or something representing 'you' or a 'scan'.

2. Add branches and sub branches to focus your awareness on the details of the experience as it just happened: how did your body feel in detail from head to toe or vice versa? Add details

3. Add a branch each for 'thoughts': What thoughts are in your mind as you draw the Mind Map?

4. Add a branch for 'sensations': how did your body feel, in detail, during this experience? For instance, did you feel 'relaxed', 'calm', accepting things as they are? Were you too sleepy?

5. Add a branch for 'moods/feelings': what mood accompanied this session? e.g. 'felt elated' or perhaps 'couldn't focus'.

6. Use sub-branches to recall these responses to your session.

7. Add a sub branch to explain these reflections: e.g. sleepiness is an issue-perhaps try another time of day for the session?

8. Add '+'s and '-'s to each branch or sub branch depending on how you viewed the session in a positive or negative light.

Exercise 8: Inhale and Exhale (The Full Breath)

1. Stand up straight, feet apart, with your arms by your sides, and your eyes looking ahead, relaxed.

2. Over the course of four in-breaths, tense/tighten your feet muscles, then your legs, thighs, buttocks then the stomach and moving upwards to the chest, the shoulders, neck and head.

3. Now working downwards relax the tension from the head, neck, shoulders, chest, letting it go back down to the hips, buttocks, thighs, and then down to the feet and toes.

4. On the next inhale, breathe deeply and at the same time bring your arms out and up slowly and naturally to make an uplifting arc above your head (almost like a pirouette stance without the ballet or tutu!).



Moving the arms up in an arcing sweep allows air to reach the top of your lungs so ensuring a truly 'full breath'.

5. Let your fingertips touch with arms outstretched above the head. Hold this upper body position with the fully inhaled breath for three to five seconds. 6. Release the breath through your mouth or nose and let your hands arc out in a downward circle coming back to your sides and then joining up, palms facing forward, in front of the groin area.



Releasing the arms slowly in unison as you exhale gives you balance and adds to a feeling of gentle release.

This 'full breath' has two benefits; it brings air right to the top of the lungs (where the breath often doesn't reach) and it helps you anchor on the breath and be in the moment ... Mindful.

Waiting To Exhale ...

Do these breathing practices every day and you will find this wonderful feeling of calm coming into your life? Persevere and with practice your mind will follow the breath: the inbreath is the air coming into the inner world (you) and the out-breath is the air going out to the outer world (the universe). Both worlds are limitless and connected by a swinging door of breathing. All that ultimately exists is the movement of breathing, the swinging door. Use that image to help you anchor on your breath.

Daydreaming & Doodling For Creativity & Calm

"When you draw an object, the mind becomes deeply, intensely attentive ... and it's that act of attention that allows you to really grasp something, to become fully conscious of it."

US Designer Milton Glaser



Playful horse-a free flowing sketch - a super-doodle in motion by Deborah Skinner

Ever stare out the of the window at school and have the teacher say "you [insert your name here] stop daydreaming!!"? Or been caught drawing squiggles and patterns in the margins of your notes and been told "you [insert your name here] what are you doing? Stop doodling and pay attention to me!"?

Back in the day of the "received wisdom", daydreaming and doodling were considered a waste of time-something you might do during lazy moments in between actually thinking. Attitudes, especially to doodling, are changing, not least because there were drawings, pictograms and hieroglyphics long before the first writings.

Today we shouldn't be asking "when did I start drawing?" but "when did I stop drawing?" Every one of us has doodled in our earliest lives.

Drawing = Thinking

I'm a firm believer that doodling is a massively good activity for the brain, and reinforces my belief that DRAWING= THINKING. I'm not the only person who believes this. Doodling, putting pen or pencil to paper, is a building block of Mind Mapping and the mind's never-ending natural connectivity. Doodling helps de-clutter the mind and makes you more in tune with your body, giving feedback about what's going on in your mental and emotional states-in other words, practising it will make your mind more in tune with Mindfulness.

Doodling to Unlock Your Mind

Like Mind Maps, doodles are thinking tools and it's that focus on attention that allows you to be in a Mindful state. What are doodles? Spontaneous scrawls, spirals, shapes or abstract patterns or representations of things around us-'thought experiments' in other words, prototype Mind Maps. Sunni Brown, an expressive champion of doodling, argues it should be seen as a tool for unlocking your brain via pen and pad (much like a Mind Map). Like Mind Mapping, it is the process itself, not the aesthetic quality that counts. As with Mind Mapping, it is enjoyable in its own right, an antidote to boredom and a springboard for insights and discoveries. Just like daydreaming too. Scientific research has shown that doodling engages your mind 1n a multi-dimensional way that makes your learning or brainstorming memorable. Doodling can act like weaving a tapestry, helping you to get the bigger picture and helping with insights and 'ah-ha' moments. Listening while doodling has a powerful cognitive effect. A Mind Map can be seen as a sophisticated and structured doodle with added Mindfulness. I wholeheartedly-whole mindedly - encourage you to block out the naysayers and start doing the doodle! Do doodle, do!

Focused Daydreaming

"Imagination is more important than knowledge. For knowledge is limited to all we now know and understand,



while imagination embraces the entire world, and all there ever will be to know and understand." Albert Einstein

Einstein credited daydreaming, what he called 'thought experiments', for giving him those leaps of ideas that led to his breakthrough formula E=MC2. He is believed to have begun his theory of relativity while he daydreamed about what it would be like to travel so fast that you could ride alongside a light beam (after running away from school because of its rote-learning regime). Sir Isaac Newton (who was described by his teachers as 'idle' and 'inattentive') was famously daydreaming under an apple tree in his mother's garden in Lincolnshire when he developed his theory of gravity after he happened to watch an apple fall from the tree. Of course, both Einstein and Newton were also analytical, logical, number-crunching thinkers too. These geniuses saw the importance of visual imagination. It is also perhaps no surprise that JRR Tolkienthe creator of the great fantasy universe in Lord of the Rings - was a prolific doodler and made hundreds of swirling designs and geometric patterns on any scrap of paper, card and newspaper that came to hand. His plants, fronds and trees are proto Mind Maps!

Free Your Mind - Let it Roam

It is both intuitive and backed by scientific research that when we are relaxed, we are more creative, because we have more brain capacity available-and we can tap into this



capacity through daydreaming. Wolfgang Amadeus Mozart famously wrote, in a letter to his father,

"When I am completely myself, entirely alone or during the night when I cannot sleep, it is on these occasions that my

ideas flow best and most abundantly. Whence and how these come I know not and nor can I force them."

Many of us might think that the unconscious mind is chaotic and disorderly. In fact, it's perfectly capable of good, hard, 'purposeful' work. It can synthesise and connect information, releasing it back into our conscious mind in the form of intuitions, inklings and insights. Daydream advocate and author Amy Fries, puts it this way:

'We worship at the altar of focus while making daydreaming the crazy uncle in the attic.'

But what else can help us visualise, imagine, model and create with our minds as much as daydreaming?

When we are daydreaming, we are literally in a wonder-full, creative state of mind, tapping into and connecting the most complex regions of the brain. Eventually you start seeing connections that you wouldn't have seen before, because you would never have logically allowed your mind to make those connections. That's how Mind Maps work too.

My mind loves to do a lot of 'mind wandering' when I'm travelling on a train, a plane or a car. I always pay close attention to any ideas that come up and note them via a Mind Map.

We spend too much time interacting with mobile phones, laptops and other hand-held devices-UK users on average check their phones 85 times a day. Consequently, we are losing those moments when we just used to stare at nature and wonder. We need to reclaim those mental 'asides' and



From doodle to a 25-ft iconic sculpture – the Headington Shark splash-landed on an unsuspecting Oxford suburban street in August 1986. Images courtesy John Buckley and © Bill Heine.

let those daydreams naturally perform the cognitive functions your brain needs.

Whenever you get the chance to daydream or doodle-do it! Remember, they both involve the mind in 'being mode' rather than 'chattering/thinking or doing mode' and help us to get out of our heads and learn to experience the world directly, without the relentless commentary of our thoughts: these thoughts are 'mental events' nothing more, nothing less: Your thoughts are only a part apart-of /from you.
Mindful Meditation

When You Are Thinking of Your Thoughts Then Your Thoughts Cannot Be You



Daydreaming, and Mind Mapping those daydreams (an example is shown opposite), can help you create the right mental climate to achieve Mindfulness.

Because You Are Thinking Them. Your Thoughts Are Thoughts. Your Thoughts Are Real. Your Thoughts Are Not Apart from You. Your Thoughts Are A Part of You.

You Can Become a Best Friend

With Your Millions of Thoughts You Are an Emperor/Empress Of an Army of Millions and Millions of Good Soldiers.

Feed Them, Train Them, Love Them.



All You Need is Self Love

As part of the process of Mind Mapping and Mindfulness, you need to embrace the notion of self-care and selfcompassion. 'Bigging yourself up' or just a gentle, metaphorical pat on the back is the critical counterbalance to all the negative feelings and pervading sense of unhappiness that can all too easily dominate your mindscape. We all have the potential to enjoy the life that is around us and that is part of us. Sadly, many of us seem wilfully not to want to do it and instead to do ourselves down. We prefer not to do ourselves favours, and rather to berate ourselves rather than give ourselves a 'high-five' and say "well done", "you were amazing" when we've done something good, positive, or selfless. We tend to look for the negative when what we really need is time-out for self-compassion, the bedrock of Mindfulness.

How have we let self-doubt, self-loathing become such a dominant force? Well, it's partly the way we live in the modern world: we take a perverse pleasure in being just busy all the time, as if that equates with a successful quality of life. Believe me it does not. We are proud of our multitasking skills, much of which we do on cruise control, from getting up in the morning to going to bed at night-and much of the day in between. We end up doing things habitually without thinking, in a never-ending routine not dissimilar from the hamster running around its wheel. Some of this is 'good': autopilot is fine up to a point.

Shakespeare identified and excoriated this dangerous syndrome in his great Macbeth Soliloqy: "Tomorow and tomorrow and tomorrow, creeps in this petty pace from day to day ..."



Heartfulness

Mindfulness has been described as 'heartfulness' because it is really about having a compassionate awareness. That is the ultimate counterbalance to those recurring feelings of unhappiness, depression and worry that things cannot get better.



Through Mind Mapping and Mindfulness, we can bring that heartfulness-that very warm, lightness-of-heart feeling into our lives and put aside negative judgments of ourselvesthose big sticks with which we have been beating up ourselves. If you can feel self-compassion and be kind to yourself first, you can be true to others. A moment of selfcompassion can change your day-freeing yourself from the trap of destructive thoughts and emotions-and a succession of such moments can change your life.

Self-compassion is the real basis for compassion for others and is innately part of our 'Spiritual Intelligence' that part of our minds concerned with our compassion and love for other living things and the environment, our charitability, our understanding, our big-picturethinking, our positivity and our generosity. (For your knowledge I have written a book on 'Spiritual Intelligence' with books on our other multiple intelligences.)

The anchor for self-compassion is the breath: if you do your breathing exercise you will expand the power of Spiritual Intelligence, learning to inhale and exhale in a rhythmical way rather than 'hold our breath'. The result is you will feel more relaxed, happy and 'at one' with the world.

Exercise 9: Mind Map your Self-Compassion

Make a Mind Map of everything in your life for which you can be grateful. Remember self-compassion is about taking care of yourself just as you would treat someone you love



dearly. Think also about the little things that make you feel good: the smile on a face, feeling the sun on your face or a gentle breeze on your arms, the colours of autumn, or taking pleasure in listening to people and sharing your thoughts and feelings with them. Here is a Mind Map of selfcompassion, try drawing one yourself using key images and words that reflect how your inner self can engage positively with the outside world. You can then use this as a memorytrigger to boost your self-confidence from the inside out. How you view yourself-whether your mindset is set in stone or prepared to grow and develop-profoundly affects the way you lead your life.

Compassion for Nature

Here is a breathing / balancing / awareness exercise that can energize you, and can generate much tranquillity and inner peace. It allows an overall energy flow within the body, helps you further learn breathing control, and helps you to develop your visualization ability. For some people it can be more rewarding in finding that state of 'being' than the more traditional sitting positions.

In this exercise we are relying on the ancient Indian discipline of yoga. Today yoga is undertaken chiefly as an aid to well-being. It offers a variation on Mindfulness with its use of controlled breathing and the adoption of specific physical postures which stretch or strengthen the body, sometimes in combination with meditation.

This exercise would be called the Tree Pose in yoga. For me it both mimics a presentational tree, and also allows you to feel your body and mind expanded down to your roots and up to your branches. It brings a Mind Map to life! The tree-



especially a mature oak as in the cover of the title-is the epitome of the Mind Map, with its myriad interconnect branches that gloriously change colour, shape and attachments with the seasons. It is also a wonderful and natural representation of the inner workings of our beautiful minds.

Mindful Meditation

The Mind Map helps bring you to life The branches soar to all the stars The roots reach to the core of your wandering soul Your Mind Maps are your best friends on your Life journey

Exercise 10: Mind-Body Balance

Achieving a real physical balance will help you gain a mental steadiness and calmness. Keeping in a 'being' frame of mind while balancing on one foot, teaches you to sway gently like a tree in the breeze, while remaining steady and sure no matter what the outside circumstances may be.

Regular practice will improve your focus and your ability to concentrate in all areas of your life, particularly during those times when you might normally feel "off-balance."

1. Stand with your feet together, inner ankles and inner knees touching. Feel your body 'centred' with your weight evenly across both feet, grounded equally from your upper body to your ankles, feet and toes.

2. Shift your weight to your left foot.

3. Bend your right knee, and raise your right inner ankle. (Reach only so far as you feel comfortable and able to balance .. resting the foot on the lower calf below the kneecaps is fine.)

4. Adjust your position so that the centre of your pelvis is directly over your left foot.

5. Rest your hands on your hips and feel your body extended toward the floor.



6. Now, press your palms together in prayer position at your chest, with your thumbs resting on the centre of your chest.

7. Keep your gaze gently on a fixed point in front of you.8. Hold for 30 seconds or what feels comfortable for you while you inhale, exhale and relax. Take several deep breaths, raising up on each inhale and feeling rooted down with each exhale.

9. The full 'tree pose' (as it is known in yoga) has the sole of the foot resting on the inner thigh of your other leg;

if that's too awkward, raise your leg gently behind and lower down your other leg and rest the front of the foot behind your calf muscle.

10. Repeat for the same amount of time standing on the opposite foot. This exercise is also a good test of your mental calmness as you will lose your balance from time to time, so will you be thinking calm thoughts as that happens?

Now Mind Map that experience. How long did you stand on one leg? Can you think kind thoughts even as you lose your balance? (which you will). Did you get frustrated and couldn't regain your composure and find the pose again? Mind Map your feelings, thoughts and emotions about them at the time or later on reflection. You can gently focus your attention to break those negative loops and feel a compassion for yourself.

Re-Framing Your Mind

I have touched upon the idea that your thoughts are not the reality of the situation in which you are, and that if you are feeling down with negative thoughts saying 'why do I feel the way I do?' this is just a frame of mind.

It is not the experience that makes you unhappy, it's how you relate to that experience. Thoughts are not 'reality', they are not 'you' - they are just thoughts, mental events from which you can liberate yourself by being in the moment and letting go.

For example, you are walking down the street and someone you know passes by and doesn't acknowledge you. Why? You wonder. Should I have smiled or waved? Did they not see me? Did I do something wrong? Am I to blame? Or (and you might be less likely to consider this) was the sun shining in their face so they couldn't see me? Were they preoccupied with their thoughts? On that street you are projecting the doubts and anxiety in your mind.

While you may not always have control over the events affecting you, you can control your perception of them. In other words, if you change your attitude - reframe the problem as an opportunity - the problem can disappear. The goal is to obtain inner peace. You can achieve this by learning how to overcome misfortune, practising restraint, being wary of impulses and accepting your transient nature.

In a sense, suffering stems not from the events in our lives, it stems from our judgements about them. One technique to help harness your positive thoughts is to Mind Map your thoughts and actions each day to see whether you are making progress at strengthening good habits and weakening bad habits.

Exercise 11: A Mind Map for Changing Your Attitude

Here is an exercise that is good for developing a compassionate awareness and allowing it to surface from the swamp of mindlessness. You will be amazed how quickly and easily you can make associations and connections with all those elements that can springboard you from self-compassion to compassion and caring for others.

1. Draw your central image.

2. Create different coloured branches radiating from the central image.



3. Add key words that boost your sense of what is positive and good about you, to help you reframe your mind and adopt a positive growth mind-set.

4. Also try simple drawings instead of key words to visualise your outcomes. Try to do a daily or weekly Mind Map of this scenario.

Be Social

Self-compassion is the springboard for compassion for others. Compassion is strengthened by social interaction: we do need to engage with other people face to face which, ironically, 'social' media is constantly reducing; that's why we sadly think 'likes' and smiley emoticons can be a substitute for a hug or a handshake. They cannot be. We are social beings, and we need social interactions for good mental and physical health. Again, with regard to feeling frazzled, a problem shared is a problem halved.

Seeking Self Compassion

Instead of beating yourself up, why should you deny yourself the same tenderness and warmth and understanding you give to others in order to help them feel better about themselves? For every negative thought there's a positive one: hold on to that thought. You can bring back selfcompassion by trying this: every time a bad thing happens, divide it by five good thoughts; and every time a good thing happens multiply it by five, which will give you a more realistic perspective -a great starting point. As comedienne Ruby Wax once said: "start not with the glass half empty but the glass half broken cutting my foot ... that's my theme song." That is a long way back to begin rediscovering selfcompassion!

Finding self-compassion is within all our abilities: for example, you can figure out what gives you pleasure and give yourself tiny, tiny, tiny rewards. When you give yourself a reward notice it, savour it, or simply acknowledge that you need to take a rest, so do that and 'take five', or sit down and listen to a piece of your favourite music, or stroke your cat or hug your dog.

See Your Smile

Spirituality does not have to be serious. Perhaps it is no surprise that Buddhist monks are masters of the smile. Try this simple exercise, it works for me: on your walking exercise try to catch peoples' eyes as you pass them; chances are that even the most serious faces will smile back-and that will make you feel good inside too.

Laughter Really Is The Best Brain Medicine

Laughter really can be the best medicine for self-care. It is



infectious and the brain associates it with happiness. Laughter is infectious. Public speakers will often include in their talk a joke-a tried and trusted way of opening and engaging minds. And laughter really does refresh your thinking. It draws oxygen in to your brain and makes those random positive creative connections more likely.

Keeping your sense of humour means that you are able to find a funny side to an otherwise difficult situation. That requires you to see the challenge from a new angle. Shakespeare used the 'fool' to lighten his sombre histories. If you see a problem as a dark, gloomy cloud hanging over you, coming at it from a new angle is like poking a ray of sunshine through it. Once you have poked one ray of sunshine into the problem, you can often start seeing other potential solutions. And soon that cloud is not so gloomy. Let in more rays of sunshine!

The Power of Ritual

To tap in to your Spiritual Intelligence, and become more self-affirming and self-compassionate, it really helps to create a ritual around your Mindfulness. We all understand rituals in the religious or social setting, and ritual can also be private, personal and highly individual; for example, taking time to stop and admire a view every time you walk over a certain bridge.

Ritual connects us to our deepest selves and to each other.

And the one thing that makes ritual different from habit is Intention. With habit we are back on autopilot; having intention is to bring conscious awareness into what we are doing and to shift our mindset from carrying out a repeated act unconsciously to making the repetitive process a conscious act.

Ritual In The Home

The obvious place to start to create your ritual is at home: not easy as the home can seem anti-sanctuary with the household chores, the dog whining for a walk, cats meowing to be fed, and children wanting more and more of your time and attention. So how do you find sanctuary in your home? Through ritual.

Ritual provides that space and allows your mind and spirit to be secure in the knowledge that within that space you can become more involved in your thoughts and actions that allow you to enter more fully into your spiritual side. Rituals give sanctuary for contemplation.



Getting yourself to come off automatic pilot in the things you do (such as staring at a screen or making a cup of tea) and get grounded daily is an achievement in itself—you will have made a conscious effort to practise Mindfulness.

You can create a spiritual or safe space at home using a few favourite items such as a comfy cushion or woollen rug and some candles (scented or otherwise) -these can enhance the mood for many of us. Another example would be a bath with a candle and some scented salts. It is a perfect environment for submerging metaphorically, and actually, the noise in your head. In place of noise, you hear and see your diaphragm open up, and breathing becomes more regular and deeper. Your body becomes quiet. This is a powerful boost for self-reflection.

Creating a ritual which you repeat time and again will lay down a pathway in your brain which will become more defined and accessible-this is as true for a meditative-



Creating a calm indoor space.

spiritual 'workout' as it is for gym training. It will save you time getting into a receptive mindscape. Choose or create your welcoming space ... it should feel like putting on a favourite sweater. Each time you practise you will be building on previous good practices.

As well as a place for your ritual you need to put aside time too, ideally twenty to thirty minutes a day. It is up to you. A slot in the weekend or early evening are often good times to switch off (including your mobile etc) so people cannot reach you-and you stop checking your social media for 'likes'. You can make Mind Mapping part of that ritual time, practising or creating new ones.

Establish a ritual and you will be giving yourself time and space for a more meaningful and Mindful engagement and communication with yourself (and others and nature). Now practise Mind Mapping and breathing exercises and resolve to strengthen your ritual every day!

Ritual on the Go

Remember also, that ritual need not be confined to the home: simple daily rituals such as walking the dog, or planting in the garden, even being in a queue, or waiting for a bus, can provide us with a 'down time' to disengage. As you know, I'm a great walker, and passionately believe it's most liberating to the spirit. Through walking I release my thoughts and let my mind wander free to make connections, while my senses pick up all that the world around me has to offer (which is bountiful). Make walking central to your wellbeing and factor it in regularly to your daily routine; it's meditative in its own right. With Mindful intention it is a double-whammy of feel-good-factors.





Going with the outdoor flow ...



Exercise 12: More Mindful Walking

Here's how to build your Walking the Walk exercise into a normal everyday activity making each walk a wonderful practice in present-moment awareness. Dogs are optional but very mindful. No headphones!

1. Wear comfortable and appropriate clothes and footwear for the terrain and weather you will encounter. Allow yourself 30 to 40 minutes.

2. As you walk, start to focus on the soles of your feet and feel the physical contact as they make contact with ground.

3. Be aware of the sensation of the weight of your upper body carried by your left thigh, knee, leg, foot and toes. Feel the transfer of weight to the right thigh, knee, leg, foot and toes.

4. Notice the heel coming off the ground, then flexing of your knees and the sensations in your calf muscles.

5. As you walk, naturally look around you and really take in the sights, sounds and smells of what passes by. Really breathe in the scents of a meadow or street and enioy the aromas.

6. Listen intently to the noises around you and see if you can compartmentalize them and hone them into one that makes you smile. Hear the gentle hum of traffic, or the sound of a wheel swishing through a puddle, or birdsong, or the breeze in the trees.

7. Feel the wind, sun or rain on your face and be thankful.

8. Take pleasure (and pause if you feel like it) in every unexpected new vista as it reveals itself, and feel at one with your surroundings.

9. Feel good in yourself and if you feel up to it smile and say 'hello' to passing walkers: you'd be surprised how this can put a smile on their faces even if at first they look pensive, or absorbed in their thoughts.

10. Be at one with yourself in the rhythm and motion and sensations of the movement.

As we take the (conscious) decision to go for a walk we also begin the (more often than not unconscious) process of mapping the world. And in logging the external environment we co-create a map of our own internal landscape: a map of awareness and a map of possibility. A Mind Map in other words!

The great geniuses of the world - Einstein, Leonardo Da Vinci, Darwin, Jane Goodall, Sir Isaac Newton, Maria Montessori, Beethoven-all took inspiration from, and walked in, nature. Their minds were full of early morning birdsong, their senses filled with the dappled sunlight filtering through the trees, and visions of nature in its beauty as they went on their walks.

A Mindful Diet

We need brain food as much as we need belly food. Our brains at rest use about 20 per cent of our calorific energy

even though it is just 2 per cent of the body's weight. Our brains need fuel - and not simply calories - foods packed with brain-boosting nutrients. Here is food for (Mindful) thought.

1. Salmon or other fish oils which contain the omega-3 family of fatty acids help maintain brain cells and build stronger and better connections between them.

2. Brightly coloured fruit and vegetables, notably blueberries and spinach, are high in antioxidants that can also maintain healthy brain cells and improve brain cell connectivity

3. Avocado is one of the most easily digestible sources of high quality protein and healthy fats. Avocado also contains antioxidants, fibre and folate, among other nutrients.

4. Nuts contain protein, complex carbs, and beneficial fats. They also provide a good dose of vitamin E, which promotes brain function. The best nuts are almonds, followed by hazelnuts, cashews, and walnuts. However, if allergic stay 100% off nuts!!

5. Oatmeal promotes healthy blood flow to help your brain function better. It also contains fibre, protein, antioxidants, and a bit of Omega3.

6. Beans are loaded with fibre, vitamins, minerals, protein, and folic acid and provide a slow, stable supply of glucose for your brain.



Here is a selection of super mind foods. Remember that the best brain food is water; it makes up about 80 per cent of your brain anyway. Dehydration is bad for the body and also for the brain: so drink tap water, hot water, herbal and non-caffeine teas.

Conclusion: Coming Full Circle

Using the unique combination of Mind Mapping and Mindful breathing and awareness, you now have a kinder sense of yourself, and you will continue to become your own best friend.

You have now been introduced to the art and science of Mind Mapping as a route to achieving the Mindfulness required to:

- learn from and savour the past, while
- strategising fruitfully for the future, and

• living meaningfully in the present, enjoying life on a physical, spiritual and intellectual plane of existence.

Let Mind Mapping and Mindfulness become deep-rooted in your mindscape: combining these two manifestations of human intelligence equips you magnificently with the tools to discover amazing mindful insights, embrace those 'a-ha', mind-enhancing moments and find peace of mind. Harness the mental power of Mind Mapping and Mindfulness in tandem and you will be calm under pressure as you visualize your thoughts and actions, put things in perspective, and pursue a life 'fully-lived'.

Floreant Dendritae! (or May your Brain Cells Flourish!)

Tony Buzan



Getting in Touch

For enquiries about our courses, or to submit your Mind Maps for personal attention and possible publication, send them to info@tonybuzan.com





Web www.tonybuzan.com

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Also see synapsia.net



The Brain, The Oceans and Mind Sports

Johann Wolfgang von Goethe, a man who regularly tops the list of record high IQ's, impressively described chess as "the touchstone of the intellect"

This quotation is firmly grounded in the verifiable text of Goethe's play "Goetz von Berlichingen." An equally flattering dictum, that chess is the 'gymnasium of the mind', has variously been attributed to Blaise Pascal, Gottfried Leibnitz and Vladimir Ilych Lenin, though no clear source has ever been identified for any of those three.

Certainly, chess has now been recognised by scientists, such as Professor Joe Verghese, from the Albert Einstein Institute in New York, as a valid activity for improving mental agility. As that great English chess writer and champion, Victorian polymath Howard Staunton opined, chess is the most fitting recreation for those of genius.

I have now been contacted by my friend of many years, the eminent academic Professor Michael A. Crawford.

Having celebrated his 90th birthday, Michael is one of the fittest people I know, both mentally and physically. Recipient of The Order of the Rising Sun Medal, awarded by the Emperor of Japan no less, also Director of the Institute of Brain Chemistry and Human Nutrition at London's Imperial College, Prof Crawford has expressed his fears to me concerning the threat posed by what he considers to be a general global downturn in intelligence.

There are plans to publish his detailed warnings in a forthcoming book, The Brain Under Siege, which I have been privileged to see pre-publication. In it Crawford, a world leader in brain nutrition, explains why the DHA inherent in marine based foods is vital for maintaining brain function. Cow's milk may be good for building bulky mammalian bodies, but it does little to nourish the little grey cells upon which humans rely.

I am indebted to Prof Crawford for his insights, upon which I have based much of the argument. The rise in mental illhealth is, according to Crawford, a far graver menace to the survival of humanity than the climate change, so loudly trumpeted by, for example, activist Greta Thunberg.

Mental health, or otherwise, is one of Nature's ways of testing evolutionary products that first come to dominance and are then seen to their end. Identified by geological period, the five main extinctions of the past, Ordovician, Devonian, Permian, Triassic and Cretaceous, have all been triggered by the conditions of existence, one way or another, but this coming one would, in Crawford's dystopian scenario, be rather unique: it would be self-inflicted.

That particular scenario being enacted involves a form of destruction, with no thought for the needs to support the very specific nutrition of the brain, leading to declining mental health and thus diminishing IQ. It is becoming a kind of self-inflicted lobotomy.

After the Second World War, the practice of lobotomy became widespread, publicised, for example, by One Flew Over the Cuckoo's Nest (1962) a novel written by Ken Kesey set in a psychiatric hospital, and subsequently made into the multiple Oscar winning film, starring Jack Nicholson. Lobotomy also hung like the Sword of Damocles over the heroine of Tennessee William's Grand Guignol theatrical piece, Suddenly Last Summer, with its horrific description of the slaughter of baby turtles in the Encantadas (aka Galapagos) and the ritualistic cannibalisation of the flamboyant anti-hero, Cousin Sebastian. Lobotomy was widely practised for more than two decades as a treatment for schizophrenia, manic depression and bipolar disorder, among other mental illnesses. One medic alone carried out 50,000 lobotomies. Astonishingly the Portuguese neurologist, Egas Moniz, the initiator of the technique, was awarded the Nobel Prize in 1949. Yet this was surgery which resulted in traumatised individuals being unable to care for themselves and thus reduced to a largely vegetative state.

The same cuculiform title (One Flew Over ...) adorned a Broadway presentation of the book. Kirk Douglas bought the film rights and Broadway theatre was followed by the famous film from 1975, with Jack Nicholson who plays Randle McMurphy, a totally sane misfit in the psychiatric hospital, who ends up being lobotomized. The film exposed the horror of lobotomy and was only the second to win all five major Academy Awards. The first had been the 1934 Frank Capra movie, "It Happened One Night".

Best film, best actors ... triumphant across the entire spectrum of Hollywood accolades, One Flew Over the Cuckoo's Nest is firmly anchored in a literary tradition, which includes the "Marat - Sade" of Peter Weiss, "The Physicists of Friedrich Durrenmatt" and Harold Pinter's: The Hothouse", in which the setting of a lunatic asylum provides ammunition for devastating social criticism.

The film also portrayed the abuse of authority and the connivance of so many, with doubtless little thought, in an unjust iron rule and domination over those too helpless to resist.

Much the same would have applied to the Nuremberg psychiatrists at the command of those with the mindset and goal of creating the purified race, the absolute antithesis of the civilising force present in the works of Goethe, Schiller, Nietzsche and Stefan Zweig, which I have been regularly highlighting.

Nazi doctors were responsible for liquidating 167,000 psychiatric patients in the interests of purification. Rather than the Lamarckian inheritance of acquired characteristics, this represented the elimination of them, by brute force.

Still even today, there is a stigma attached to mental illness. We have a better understanding of the causes, and much of it is caused by conditions of existence, such as a poor diet, lacking in DHA and EPA, respectively, the nutrients: (docosahexaenoic acid and eicosapetaenoicacid). These are the essential building blocks of the human brain and are found in marine based nutrition, in itself, the vital element of early planetary life, enabling both intelligent life, and the ability to see, to come into being.

However, we continue to struggle to help those afflicted. For decades that stigma and lack of attention have led to the rise in mental ill-health. It is now the costliest NHS burden, greater in the United Kingdom, for example, than that of heart disease and cancer combined. A staggering figure indeed.

Mental ill-health is the single largest cause of disability in the U.K. It contributes up to 22.80% of the total burden. The wider economic costs of mental illness in England alone are £105.20 billion per annum and rising. These figures are also typical of the situation worldwide.

In Prof Crawford's apocalyptic worst scenario, if nothing is done to improve nutrition and stimulate the brain, then, once we are gone - perhaps the dolphins , who have identical bones to those of the human hand in their flippers , as well as vestigial legs , during embryonic development, will turn their attention to the vacant seashore, to which natural abundance will have returned with a vengeance.

A case in point is the landscape surrounding the Chernobyl nuclear plant, which famously suffered a cataclysmic meltdown in the mid 1980's, for the relief of which the two Soviet chess champions, Garry Kasparov and Anatoly Karpov, donated much of their prize money from the 1986 world chess championship in London. Evacuated by humans, who abandoned all local cities and industrial installations, the Chernobyl region swiftly and seamlessly reverted to what might be compared to a pre-lapsarian state of natural fertility and abundant wildlife.

All this might sound like a script from the Douglas Adams space and time travel fantasy, The Hitchhiker's Guide to the Galaxy, where humans are third in planetary intelligence behind dolphins and mice, but it should be remembered that whales, before they became aquatic, were both terrestrial and ambulatory.

On venturing to approach land, once again, these clever cetaceans will gain access to a calcium-rich diet, their leg and arm bones will lengthen, hands and feet will re-appear, and once they learn to sleep on land, there will be no going back. Instead of putting half their brain to sleep and operating on the other half, with turn and turnabout, as dolphins do now in their ocean home, they will be able to let the whole brain sleep and then have the full power of all 1.7Kg cranial capacity swing into operation on awakening. With the number of neurones and synapses expanding in a multilogarithmic manner with brain size, the difference between the dolphinian 1.7Kg and our dwindling 1.3Kg is enormous. Maybe this is what Nature is waiting for!

Compare this to the approximate 450g brain of a cow in

relation to body size and you can see the importance of our brain's size.

In order to avoid such disasters, we need to clean the estuaries and coastlines and restore the oceans and their productivity. We also need to devise popular methods of enhancing general human intelligence. With the threatened decline in mental health, time is running out. Nature is in the wings waiting for the day of the dolphins.

So, to me at least, the answer is clear.: it is time to start promoting mind-strengthening activities on a truly global scale.

Of course, I recommend Mind Sports as the most readily available, enjoyable and cost-effective instrument to achieve this goal. Statistics indicate that there are already 600,000,000 committed chess fans around the world, not to mention the vast additional numbers who are devoted to similarly mind-expanding Neurone connection creating games, such as Go (or Wei Chi), Shogi (Japanese chess), and Xiang Qi (Chinese chess).

In this campaign, the Internet, propelled by the various Covid-19 lockdowns, is playing a vital role. Chess is being played by millions more online 24/7, now from the coronafree safety of peoples' own homes, rather than in mass public tournaments. Meanwhile, Grandmaster chess events, and even a vast international online chess team competition, are now becoming commonplace. As I write, for example, just one website, www.chess.com, has enlisted a staggering 40,871,695 members, with 5,281,304 separate games of chess being played online every day ... and all these numbers are increasing. Alert readers will observe that from the time I wrote my introduction to this book, until the moment I wrote the conclusion, the numbers have already vastly increased!

Indeed, an article in the Sunday Telegraph of August 16, 2020, announced that Chess Grandmasters were now the world's highest earners on the global e-sports index!

Human beings are learning en masse to protect themselves from the decay of mental power! In that respect the teachings of our founder, Tony Buzan, and his faithful acolytes Dr Jorge Castaneda and Prince Marek Kasperski , have an important role to play.

Kene OBE

Ray Keene OBE

International Chess Grandmaster Global President The Tony Buzan Group Ltd





Tony Buzan was the co-inventor with his brother Prof Barry Buzan, of the world-famous Thinking, Planning and Creativity technique of Mind Mapping. Best-selling author, founder of the World Mind Mapping, Memory and Speed-Reading Championships, as well as the Brain Trust Charity, Tony sadly passed away after a tragic accident in early 2019.

Tony's legacy is being perpetuated by his brother, Professor Barry Buzan, Prince Marek Kasperski, Vanda North, Dr Jorge Castaneda, Dominic O'Brien, eight times World Memory Champion and the co-author of this book, Ray Keene.





Ray Keene OBE is an international Chess Grandmaster and Global President of The Tony Buzan Group, the organisation dedicated to preserving the heritage and teachings of Tony. Ray organised the very first world championship in any thinking sport between a human and a computer program (Dr Marion Tinsley v Chinook, World Draughts Championship, London 1992) also three world chess championships with Garry Kasparov, and twenty eight World Memory Championships at such prestigious locations as: Imperial College, London, Oxford University, Kuala Lumpur, the Kingdom of Bahrain, Hong Kong, Singapore, Guangzhou, Hainan and Wuhan, to name but a few.



"Where there is no vision, the people perish." (The Bible, Proverbs 29:18)

"Those who possess the vision will succeed." (The Aeneid by Virgil)

This book is a battle plan for the new era ushered in globally by Covid 19.

Keep your brain fit with Mind Sports Keep your body fit with Mindfulness and Healthy Diets Keep your creativity flowing with Mind Maps Fight the boredom and flab of global lockdown with the marvellous invention of Tony and Barry Buzan.

Ray Keene OBE

