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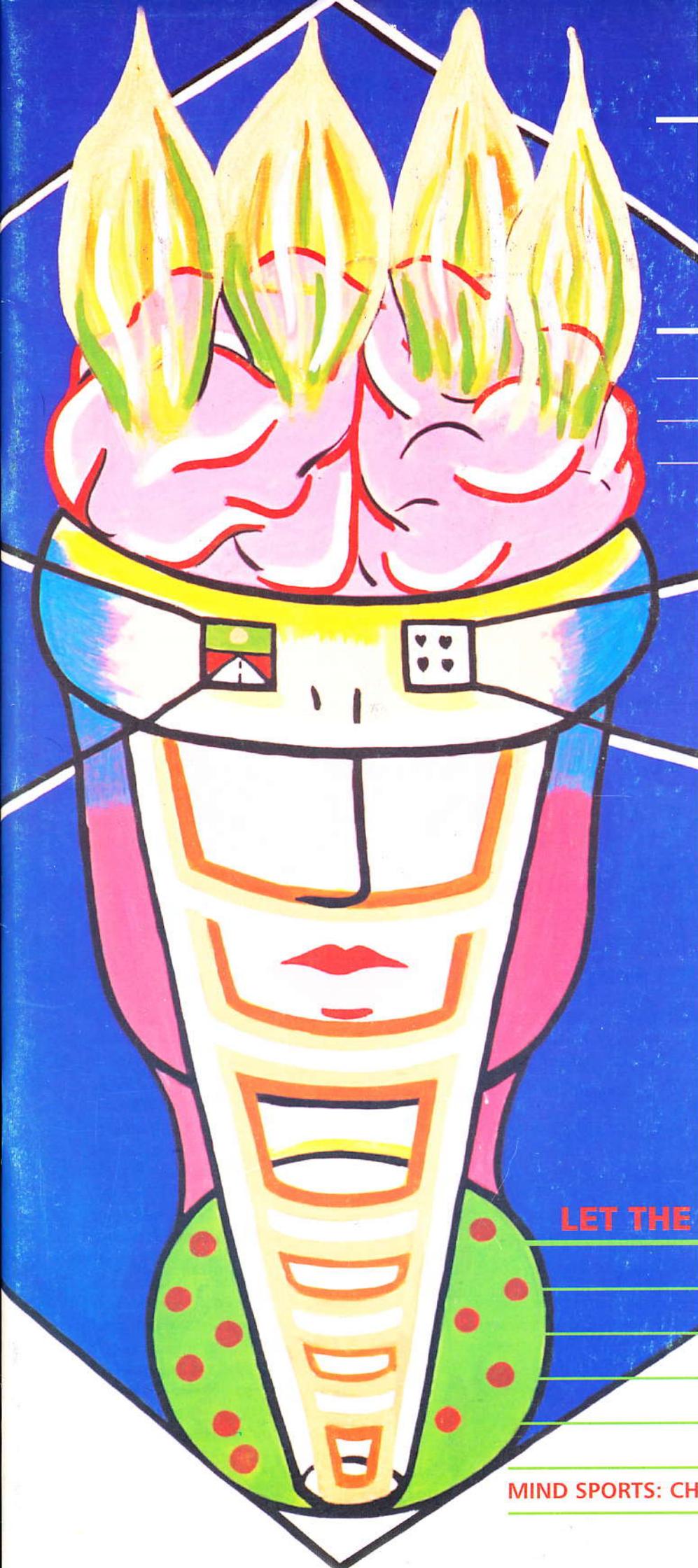
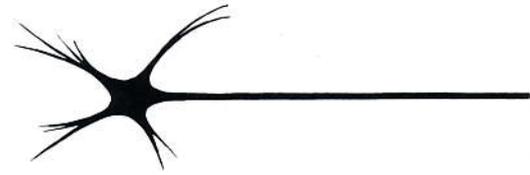
Volume 8 • Number 2

# SYNAPSIA

THINKING

BRAIN POWER

THE MIND



**LET THE BRAIN GAMES BEGIN!**

MIND SPORTS OLYMPIAD

GARRY KASPAROV VS. DEEP BLUE

MEMORY MATTERS

MIND MAPPING EXPLAINED

THE FEMALE BRAIN

MIND SPORTS: CHESS • BRIDGE • GO • CROSSWORD

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Computer programming  
Continuo  
Creative Thinking Tests  
Crossword Puzzles  
Decamentathlon  
Draughts (8x8)  
Draughts (10x10)

Entropy  
Fanorona  
Gin Rummy  
Go 19x19  
Go 13x13  
Go 9x9  
Hare and Tortoise  
IQ Competition  
Japanese Chess (Shogi)  
Jigsaw Puzzles  
Lines of Action (LOA)  
Magic - the Gathering  
Mah Jongg

Mastermind  
Memory Skills (Aug 2<sup>nd</sup>/3<sup>rd</sup>)  
Mental Calculations  
Othello (Reversi)  
Owari  
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Rummikub  
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### **The Pentamind and The Decamentathlon**

The Mind Sports Olympiad Pentamind and Decamentathlon have been designed for those who wish to test themselves across a wide range of the top Mind Sports. These will be seen as the ultimate Mind Sports challenge.

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**Visit our website: <http://www.mindsports.co.uk/>**

# SYNAPSIA EDITORIAL

## Brain Spotting

The middle of August is almost upon us and for those of us caught up in preparation for the Mind Sports Olympiad, it is approaching at breakneck speed. It really is amazingly exciting, especially as this is the first event of its kind anywhere in the world. As you will see, in this issue we have brought you up-to-date with the latest information and have included a description of some of the more esoteric proprietary games. I look forward to meeting many of you at the Royal Festival Hall.

I would like to thank all the contributors for their articles for this issue, many of whom have sent me their input well ahead of the editorial deadline. We have a number of articles about the female brain, some serious and some on the light-hearted side.

New to this edition is the book review section: I have reviewed *Samurai Chess* by Michael Gelb & Raymond Keene, a must for anyone starting out to play chess or to understand a little more about the martial arts.

We also have a section devoted to Brain Club News with items by Philip Chambers (a co-leader of the Brain Cell, London Branch), and by Ian Docherty describing his World Wide Web site. If you are a Branch Brain Cell leader, I would be very happy to print any news about your Club and its activities. Mike Tipper has also written a report about the Brain Club Conference held on the 22 June 1997; judging by the reaction of everyone there it is an event not to be missed, so we will be advertising the Conference well ahead of time next year. We will let you know the exact date in due course.

We then have all the regulars: Business Brain, Mind Map Gallery (if you have a Mind Map with which you are particularly pleased, send it to me for inclusion in the next issue), Mind Sports section, etc. So happy reading and thinking!

Many people have told me how much they have enjoyed reading the last issue. I would be very interested, as always, in receiving your comments too.

In our next issue we will bring you all

the winners of the Mind Sports Olympiad – see you then.

### From the Editor's Desk

Brain of the Year 1997; Brain of the Decade; Brain of the 20th Century; Brain of the Millennium and Brain of All Time.

At the Brain Club Conference, held on 22 June 1997, we asked the delegates to write down their preferences for the above categories. From those submitted the following trend of nominations is initially as follows:

#### *Brain of the Year 1997*

Richard Branson and Deepak Chopra

#### *Brain of the Decade*

Bill Gates and Nelson Mandela

#### *Brain of the 20th Century*

Einstein and Gandhi

#### *Brain of the Millennium*

Michelangelo

#### *Brain of All Time*

Leonardo da Vinci

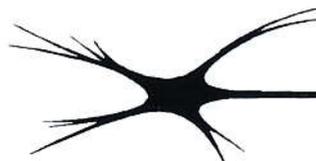
I would be delighted to receive your nominations – please let me know.

### Front Cover Illustration

The front cover of this issue of *Synapsia* features the Mind Sports Olympiad logo which comprises a giant painting by Lorraine Gill entitled *Intellect Ignited*. Lorraine describes her work:

'I have been more than honoured to provide a giant logo for the Mind Sports Olympiad. The painting is approximately (in total) 13 x 6 feet.

'Each painting represents a simplified idea of Mind Sports. On the front cover you will see the central painting which symbolises the torch of achievement, interwoven with concepts of perceptual games.'



I would be very glad to receive your comments on this issue - your feedback is vital! In our next issue I would like to start a letters page, so please write, ring, fax or e-mail me.

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The editor reserves the right to shorten, amend or change any contribution accepted for publication. Please submit contributions on disk (ASCII or Word 6.0 are the preferred formats) if possible. If you would like articles returned, please include an appropriate SAE.

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Pécub, the world's fastest brain cartoonist, is happy to provide cartoons based on your ideas and requests. All cartoons are by Pécub unless otherwise indicated.

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# SYNAPTIC FLASHES

## Latest Brain News

### Lana Israel – Female Brain Extraordinaire

Erstwhile *Synapsia* contributor, 1994 Brain of the Year and Brain Club member Lana Israel (now aged 21) has just scooped a Rhodes scholarship to Oxford University. Nearly 1,000 students from 323 American colleges and universities applied for the coveted scholarships and Lana's notable achievement record secured her one of just 32 places on offer. Having recently graduated from Harvard University, Lana, whose goal since she was 13 has been to vitalise global education, will now spend two years in Oxford studying memory and motivation in children, an area in which, of course, she is already an expert.

'When I was younger,' she said recently, 'I saw that Mind Mapping worked. Then I got to college and learned why it worked. Now I am really intrigued about researching it at Oxford.'

### Open University Finally Ousted

Regular readers of *Synapsia* will recall the phenomenal achievement of the Open University team (average age 50) in smashing the *University Challenge* points-scoring record on their way to the later stages of this year's competition. In the semi-final they then even managed to surpass their own record of 395 points, scoring 415 points and achieving a record 350-point margin of victory.

The OU captain Harriet Courtney attributed their excellent run in the competition not to age or experience but to 'quickness on the buzzer and a great memory'. Sadly, however, her team met their match in the final against Magdalen, Oxford, in the form of Classics student Colin Andress who was first to the buzzer on no less than 10 of the 27 'starter for ten' questions, nine of which he answered correctly. Andress's mental dexterity enabled his team to establish a crucial 50-0 lead in the first few minutes of the contest, which eventually finished 250-195.

### Robo-Gloat

Although Garry Kasparov's image of invincibility may have taken a dent or two from his recent defeat by IBM's Deep

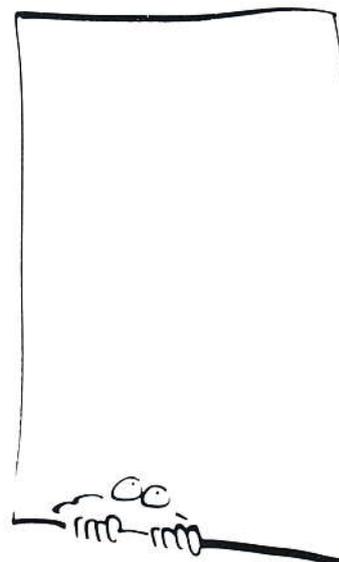
Blue (see *A New Kind of Intelligence* in this issue), at least he can take some consolation from the fact that he wasn't forced to put up with a gloating victor. Despite the millions of dollars' worth of computing power that has gone into the Deep Blue program, of course it possesses none of the complexities of human emotion; it can only complete one task – playing chess – albeit to a very high standard.

Perhaps Garry should try to prevent IBM from linking up with engineers at the University of Tokyo who have constructed a robot with the capacity to display different moods. Wired with neural networks, this robot (tagged 'Skin Deep' by *The Guardian*) can interpret sadness, fear, happiness, surprise and anger. The developers hope that one day it will be able to recognise cues from human emotion and react in appropriate fashion. However, this may be a double-edged sword: a computer attempting to find a response to an event such as Garry's sixth game defeat would probably have its lights put out in no uncertain fashion!

### Miguel Najdorf (1910-1997)

*Synapsia* regrets to report the death of the Polish/Argentine Grandmaster Miguel Najdorf, one of the greatest non-Soviet players of the post-war era and one of the most popular figures in the chess world. In a long and distinguished career Najdorf scored victories over World Champions Botvinnik, Petrosian, Tal and Fischer. While he was competing for Poland in the Buenos Aires Olympiad in 1939 war broke out and he decided to remain in Argentina, eventually switching nationality. He later discovered that his parents, wife, daughter and four brothers had been massacred by the Nazis, along with all his other 300 relations.

The Argentine maestro was a household name in Buenos Aires and lent his name to the Najdorf variation of the Sicilian, Garry Kasparov's key defence in his World Championship contests with Karpov, Short and Anand. It was perhaps fitting that a week before his death he was guest of honour at a simultaneous display by Garry Kasparov in Madrid.



# LET THE BRAIN GAMES BEGIN!

**In this article we preview the Mind Sports Olympiad (which, sponsored by Skandia, is taking place at the Royal Festival Hall between August 18 and 24) and the concept of Intellectual Capital.**

Global insurance and financial services giant Skandia are to sponsor the 1<sup>st</sup> Mind Sports Olympiad. This event will offer the world's largest ever prize fund for an open to all Mind Sports Olympiad tournament, with prizes to the value of £100,000.

Skandia have already made their mark on the intellectuals of the world financial network by establishing their Future Centre, which predicts global trends and prepares to meet and master them, before rivals have even necessarily detected their existence. During the Mind Sports Olympiad the book *Intellectual Capital*, written by Skandia executive Leif Edvinsson will be launched.

John Williams of the English Bridge Union, welcoming this new bid, said: 'There has not been a tradition of bridge in London during the summer – it's a quiet time. The bridge events at the Mind Sports Olympiad will change all that.' As the Mind Sports Olympiad will remain at the Royal Festival Hall into the next millennium, it is likely to become a familiar fixture for Bridge players.

Stewart Reuben, Chairman of the British Chess Federation said: 'The Lloyds Bank Masters used to occupy this prime spot in our calendar. The chess at the Mind Sports Olympiad will go a long way towards filling that gap.'

The watchwords of the Mind Sports Olympiad are intelligence, opportunity and the future. This is the first totally equal opportunities games – there are no

barriers of age, race, creed, physical ability or geographical location. The Virtual Mind Sports Olympiad, to be played on the Internet, will enable spectators and competitors to follow and play the games in real time, from anywhere on the planet.

The 1<sup>st</sup> Mind Sports Olympiad is already the forum for an amazing 16 separate World Championships, including the first ever IQ World Championship, endorsed by MENSA, the high IQ society, one of numerous governing bodies and associations which have pledged support.

Jan Carendi, CEO at Skandia AFS said: 'The rapid learning and Intellectual Capital that are necessary in the shaping of modern, knowledge-intensive companies are key elements in Skandia's strategy. From this perspective, the Mind Sports Olympiad highlights the shift to a new era of our minds.'

Lars-Eric Petersson, Skandia CEO and President added, 'In the present-day Knowledge Economy, this is an important event which will highlight and nurture Intellectual Capital. It is also very much in line with the fundamental values represented by the "Skandia Ideas for Life" concept. Skandia extends a warm welcome to all Mind Sports Olympiad participants.'

A prime intention of the Mind Sports Olympiad is to strike at the heart of thinking communities worldwide and, with this goal in mind, Skandia is the ideal partner. Throughout history the great minds and geniuses have created a relationship with Mind Sports. Goethe described chess as 'the touchstone of the intellect'. Dr Samuel Johnson, the immortal compiler of the English dictionary drew attention to the powerful mental qualities which can be fostered by draughts. Sophocles was a noted mnemonist and Einstein himself was a friend



## Skandia

and admirer of World Chess Champion Emanuel Lasker, and even contributed the foreword to his autobiography. The great French philosopher Jean Paul Sartre was a passionate player of 10x10 draughts.

In summary, our aim is quite simple: to make London the Mind Sports capital of the world!

We now detail each of the events taking place at the Olympiad. Many of these will be well known to readers but the less familiar games also have brief descriptions.

### Abalone

A two-player strategy game, Abalone was invented by two Frenchmen, M. Lalet and L. Levi, in 1988. The game is played on a hexagonal board composed of 61 cells in a regular pattern. Each player (White/Black) has 14 marbles in their own colour. You move (push) your own men, either singly or as a line, in any direction. The object is to push six of your opponent's balls off the board.

### Backgammon

Backgammon is a race game the origins of which can be traced back to antiquity and specifically to the Roman game Tabula and the Muslim game Nard. Today there is an international circuit that attracts the gambling elite, but backgammon also has a place as a family and social game.

### Bridge

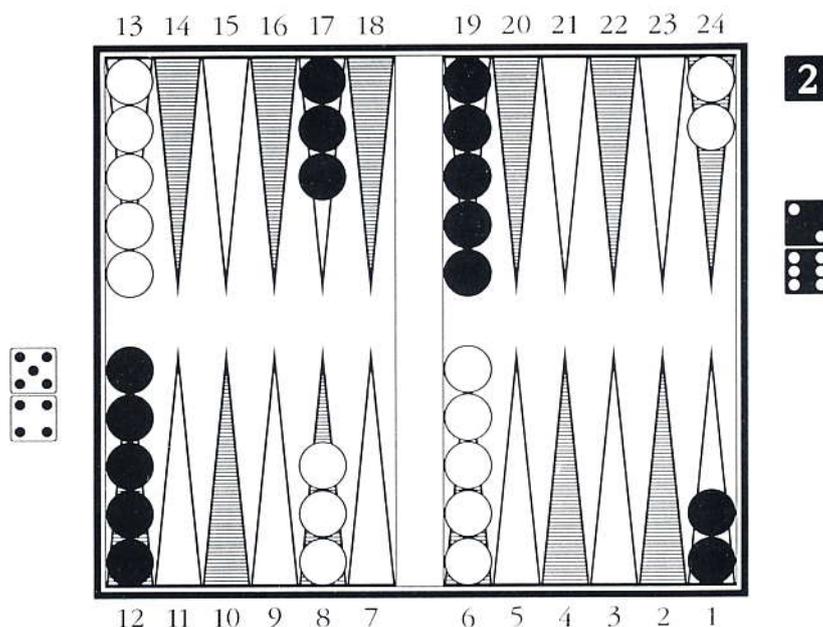
Four bridge competitions are being held at the Olympiad. The highlight of these is the four-day duplicate pairs competition with a first prize of £3,000. One-day competitions are also being held for Swiss pairs, Swiss teams and Championship teams.

### Chess

The chess competitions will be one of the many highlights of the Olympiad. Several British grandmasters are scheduled to compete in the five-day tournament in which each player will be allowed 30 minutes for each game. All will be hoping to land the first prize of £2,000 and a return ticket to New York on Concorde. Chess at the Mind Sports Olympiad will be rounded off by both five-minute and ten-minute tournaments on each of the last two days (Saturday and Sunday).

### Chinese Chess/XiangQi

The origins of Chinese chess are obscure, but it is approximately coeval with chess.



The backgammon board.

It is perhaps the world's most popular game given the population of China and the fact that most Chinese people know how to play it. The object, as in chess and shogi, is to checkmate the opposing king. The European Championship on August 23 and 24 will provide a fitting climax to a week of Chinese chess at the Olympiad.

### Computer Programming

The Computer Programming World Championship comprises five rounds, one on each of the five days of the competition. Every day the competitors will each be given a new programming task which is to be programmed on an ICL/Fujitsu Personal Computer. Once a programmer believes that the task has been successfully completed he or she takes their program disk to the control desk where it is time stamped. The tournament officials then run this program on a set of test data, noting:

- a) whether the results are correct, and if so:
- b) how long the program took to execute; and
- c) the size of the program.

Each day there is a prize for the program that correctly executes on the control data in the shortest time; another prize for the shortest program that correctly executes on the control data; and another for the programmer who consumed the smallest amount of time in completing a correct program.

Programmers who produce correct programs will have their results ranked each day, and will score points according

to their rankings. Medals will be awarded at the end of the Olympiad for the contestants with the highest point totals in each of the categories.

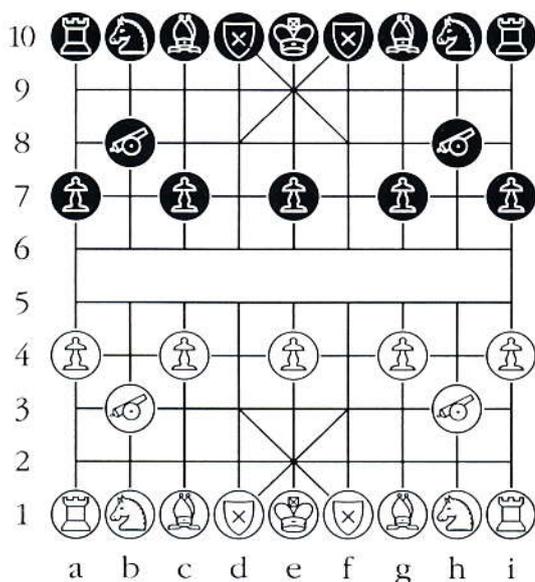
### Continuo

A pattern-matching tile game, ideally for two players, Continuo was invented by Maureen Hiron in 1982 and has sold over 5,000,000 copies in a total of 37 countries. The game consists of 42 cardboard tiles, each tile divided into 16 (4x4) small squares. Each square is of a single colour and a tile may have either two or three different colours (there are only four colours – blue, green, yellow and red – in total). Players draw tiles and lay down one in turn such that it abuts at least one tile already on the table. The player scores all squares of a group of the same colour where at least one square on the placed tile is contiguous with at least one square of the tile it abuts. A group of squares may cover several tiles. The winner is the player with the highest score when all tiles have been played.

### Creative Thinking

The Creative Thinking World Championship comprises three tests of 30-45 minutes, with two 30-minute breaks. Contestants will be set a variety of tasks involving imagination and originality. Points will be scored for: Creative Fecundity – the ability to produce a large number of ideas in a limited time; and Pure Originality – the ability to come up with ideas that other people don't consider. The scoring system will, however, reward quality more highly than quantity.

The starting position for Chinese chess.



### Crossword Puzzles

The crossword puzzle competition at the Olympiad is the only event which is not open to the general public. This event will feature around 300 of the qualifiers from the national competition sponsored by *The Times*.

### Decamentathlon

The Decamentathlon is a four-hour challenge in 10 different games and mental skills: Bridge, Chess, Creative Thinking, Draughts (Checkers) 8x8, Go, IQ, Mastermind, Memory Skills, Mental

Calculations and Othello (Reversi).

Each of the 10 games and mental skills will be worth a maximum of 100 points.

The first skill to be tested is Memory. The Memory Skills test consists of two parts:

a) memorising a normal deck of 52 playing cards which have been shuffled; and

b) memorising as many digits as possible of a 96 digit number.

Each of the other nine sections will consist of a written test. In chess, for example, competitors will be shown some positions from games and asked to write down which move they think is the best.

### Draughts/Checkers

Unlike chess, draughts (checkers) has never been properly internationalised, with the result that the game is played with different boards and under different rules in different countries. The 8x8 game we know as draughts is strictly Anglo-American; the 'Continental' game, played on a 10x10 board, is a loose description only (the Greeks and Turks, for example, play quite different games).

The main 10x10 draughts competition at the Olympiad, in which players will be hoping to win the £2,000 first prize, will be held over the first five days. There are other ten-minute tournaments on August 23 and 24.

### Entropy

Entropy is a two-player abstract strategy game that is generally considered to be a modern classic. It was invented by Dr Eric Solomon and accorded the rare 100% rating by *Games & Puzzles* magazine's Games Test Panel in 1981. The marketed game uses a 5x5 board, but the version that is being used at the Olympiad gives a much more sophisticated and skilful game. It involves a 7x7 board (not chequered) and 49 counters, seven each of seven different colours. One player is Order, the other Chaos. All the counters are placed in a bag and are drawn, one at a time and unseen, by Chaos, who places them on any empty square on the board. Each time a counter is placed Order can move any one counter on the board, including the one just played, like a rook in chess. The object of Order is to form patterns, both horizontally and vertically, which Chaos strives to prevent.

### Fanorona

A two-player abstract board game with

22 identical pieces a side, Fanorona derived in around 1680 from the Arab game of Alquerque (the board is a double alquerque board), and is the national game of Madagascar. Ceremonial games were part of the court ritual in royalist times. A feature is the 'vela partie' (debt or punishment game) forced on the loser by the victor; in effect, a handicap game (followed by an even more forbidding vela should the loser lose again!).

**Gin Rummy**

A modern (1940's) member of the large Rummy family of card games, of which Canasta is one of the best-known, Gin Rummy derived partly from the Spanish-American Coon-Can (later Conquian). Gin swept Hollywood and became known as 'the game of the stars'.

Gin Rummy is a sophisticated version of Rummy; ideally a two-player game although more can play. The object is to make sets (three or more cards of the same rank) or sequences (three or more cards of the same suit in consecutive ranks). An elegant feature of the game is the minimum requirement for going out (rummy) which is determined by the rank of the top upcard (court cards count 10).

**Go**

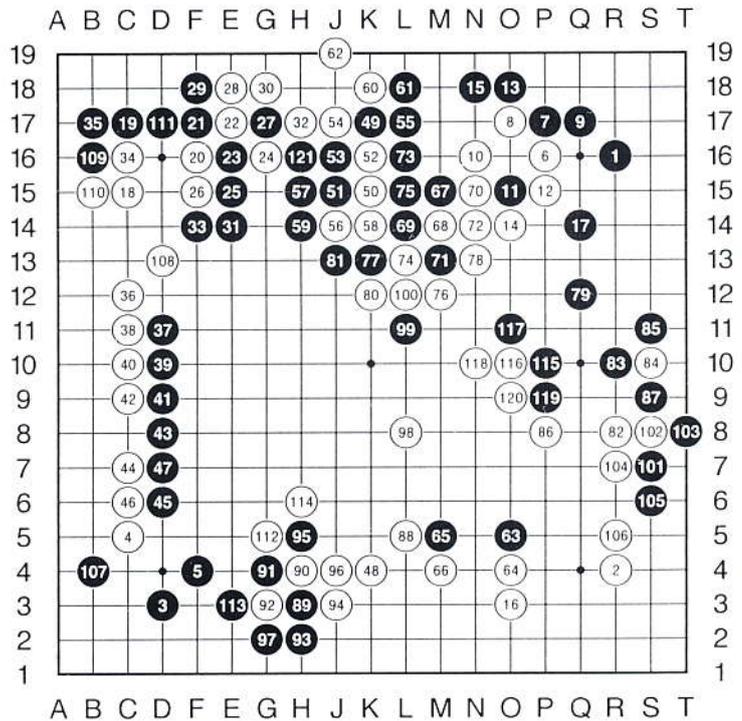
Go is a two-player abstract game played on a board of 19x19 points with a sufficiency of black and white stones (pieces). A 13x13 and a 9x9 board are sometimes used, mainly by beginners or for instructional purposes, and all three versions will be featured at the Olympiad. The top prize of £2,000 will be awarded in the five-day 19x19 competition held on August 18-22.

**Hare & Tortoise**

Hare & Tortoise is a strategic board game based on the Aesop fable of the hare who lost a race with a tortoise. It is possible to play with between two and six players, but four is ideal. Hare & Tortoise has sold over 3,000,000 copies in Germany alone, where it is known as *Hase und Igel* (Hare and Hedgehog). This simple race game has the unique feature that players move as many spaces as they like but in doing so use up energy in the form of carrots which must be replaced.

**IQ Competition**

The IQ tournaments at the Mind Sports Olympiad are being set and marked by Mensa, the high IQ society. For those



participants whose mother tongue is not English, it is possible to compete for a set of 'restricted' medals (and Pentamind points) by participating in all the non-linguistic tests. Anyone trying for the Concorde ticket and other prizes, as well as the principal medals, must take all parts of the test.

**Japanese Chess/Shogi**

A two-player strategy game of the chess family with 20 pieces a side on a 9x9 board, Japanese chess was believed to have originated around the 13th century, but new research, based on recent finds of ancient pieces, suggests an earlier date.

The four-day shogi competition at the Olympiad (August 18-21) boasts a first prize of £1,500, while the two 15-minute tournaments on August 23 and 24 each have a £400 first prize.

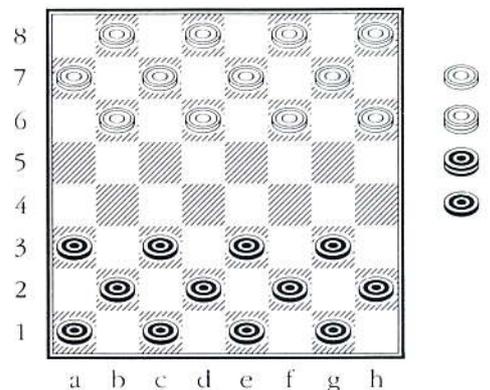
**Jigsaw Puzzles**

Each day there will be a 500-piece puzzle with four hours allowed for completion. A premium is placed on completing a puzzle. A participant's score for each puzzle is the percentage of pieces in their correct place plus a bonus of 100 if the puzzle is correctly completed.

A piece which is not in its correct place is not counted and three pieces are deducted

A game of go.

The starting position in draughts.



from the count of the number correctly placed. So, for example, a player who completes 99% of a puzzle scores 99. Completing the puzzle scores 200.

If more than one competitor completes all five puzzles correctly then the total time taken will be used to determine the winner.

**Lines of Action**

Lines of Action (LOA) is a two-player abstract game invented by the late Claude Sourcie. It is a cult game in America and Europe and is much played by correspondence. An 8x8 draughts (checkers) board and men (12 a side) are used.

**Magic - The Gathering**

A two-player fantasy trading-card game, Magic - The Gathering was invented by Richard Garfield in 1993 and is marketed by Wizards of the Coast. It has enjoyed phenomenal success and has already sold

in millions in America and Europe. The magic cards, handsomely illustrated (there are collectors who don't even play the game), are basically of two types: land (forest, swamps, etc.) and wizardry (creatures, spells, artefacts, etc.). There are literally thousands of different cards and players have their own, unique packs which they arrange before play. Cards are then turned over in sequence and acted upon. A player starts with 20 lives and the winner is the first to reduce the opponent to zero lives.

**Mah-Jongg**

Mah-Jongg is a four-player tile game akin to Rummy. Probably little more than a century old, Mah-Jongg was almost certainly developed from two Chinese card games, Hanging Horse and Watch-the-Pot. The total of 136 tiles includes three suits (circles, bamboos and characters) numbered 1-9, four of each value, plus honours tiles (winds and dragons). The bonus tiles, flowers and seasons, are a western implant that are not used in the Chinese game.

**Mastermind**

Mastermind is a two-player

code-breaking game which was invented by Marco Meirovitz and is based on the Victorian pencil-and-paper game of Bulls & Cows (amongst other names). Components are a peg board together with a sufficiency of pegs in eight colours. One player, the code-setter, secretly sets a code of four colours which may include repeated colours. The second player, the code-breaker, attempts to solve the code by placing four colours in sequence. There is a simple scoring system.

**Mental Calculations**

This tournament will be a written test in which the participants are allowed to write down only the answer to each question. No intermediate calculations or notes may be written down, either on the test paper or elsewhere.

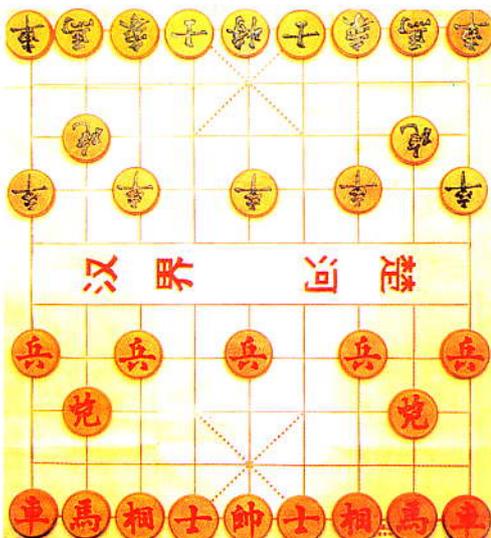
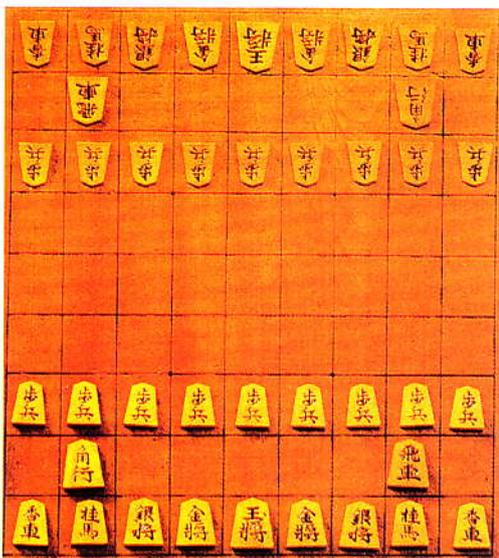
Questions will be graded so that the first ones can be answered by most schoolchildren, while the later ones will be very difficult even for the most numerate adults.

**Othello**

A two-player abstract board game, Othello was 'perfected' by Goro Hasegawa in 1971, who named it after his favourite Shakespearean character. However, apart from one small rule change, the game is identical to Reversi, which was invented by Lewis Waterman in around 1880.

Both of the Othello competitions at the Olympiad are sponsored by the British Othello Federation. The five-day tournament has a £2,000 first prize and the weekend tournament a £1,500 first prize.

Below: Shogi  
Bottom of page: XiangQi



51	42	25	40	41	32	54	52
38	53	9	14	29	33	47	55
45	8	5	4	23	22	31	30
37	12	3			6	27	39
46	13	7			1	28	44
18	17	11	2	10	26	24	59
48	43	16	20	21	15	57	58
49	50	19	34	36	35	56	60

An Othello game.

**Owari**

Owari ('fours'), is also known under a variety other names, and is but one of the four hundred or more mancala games. It is played by any number of players from two to six (but not five; two is best) using a 12-cup board.

**Rummikub**

Rummikub is a multi-player tile game based on the card game Rummy. Invented by Ephraim Hertzano, the game was first marketed in Israel in the early 1950's and now enjoys worldwide popularity. There are 106 tiles numbered 1-13, two of each value in four different colours plus two jokers; also racks on which the players stack their hands screened from the other players. The object is to assemble tiles in melds or runs, as in rummy. It is probably best played with four players.

**Scrabble**

The world's premier word game for 2-4 players (best for two), Scrabble was developed over a 15-year period by two Americans, Jim Brunot and Alfred Butts, and was launched in 1949 by Brunot.

Two Scrabble events are being held at the Olympiad. The five-day tournament has a first prize of £1,500 plus a return trip to New York on Concorde and the weekend event a first prize of £1,250.

**Skat**

A trick-taking game for three players, Skat is Germany's national card game. The rules were first codified in 1886; and the game is now controlled by the Deutscher Skatverband. A 32-card pack is used (a standard pack less the 2-6 in each suit).

**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.

The Speed Reading World Championship will comprise two readings, each followed by questions.

**Stratego (l'Attaque)**

Stratego is a two-player basic war game; inventor unknown. It has a long history

and is quite possibly based on *The Jungle Game*, which has a longer and even more obscure history. Play takes place on a 10x10 board with 40 men a side.

The first World Stratego Championship is being held at the Olympiad, with a first prize of £1,000.

**Twixt**

A two-player path-forming strategy board game of the type pioneered by Piet Hein in the 1940's with Hex, Twixt was invented by Alex Randolph. The game is played on a square board with a regular pattern of holes and a sufficiency of pieces in two colours.

**Zatre**

This modern proprietary board game has attracted an increasing band of enthusiasts in Austria, Germany, Switzerland and elsewhere in Europe. The game is mathematically based with the pieces represented by tiles carrying numbers between one and six in the manner of dominoes. The board resembles that of Scrabble with a pattern of special squares.

Full coverage of the Mind Sports Olympiad is available at the MSO website: <http://www.mindsports.co.uk>

Raymond Keene, co-organiser of the Mind Sports Olympiad.



# A NEW KIND OF INTELLIGENCE?

**Earlier this year, IBM's Deep Blue's achieved a remarkable success against World Chess Champion Garry Kasparov by winning their six-game match by the score of 3½-2½. Raymond Keene assesses the fallout from this unexpected result and dissects the critical sixth and final game.**

So Garry Kasparov has lost to Deep Blue, becoming the first human World Chess Champion to lose to a computer in a full contest, and just possibly, even the last World Champion to be human at all. Will Kasparov now, like Henry Pu Yi, the last Emperor of China, scuttle off into the wastelands of history, or will Deep Blue's victory usher in a new dawn of global fascination with chess and Mind Sports in general?

One obvious spin-off, much to IBM's advantage, would be to create a version of the Deep Blue program for use on personal computers, and launch it on the world market. With IBM having generated a staggering 1,000 million dollars worth of publicity from the match, and with a world record 22 million hits on the Internet for a sporting event, the company is uniquely placed to reap a rich commercial harvest from the intellectual capital they have so successfully and spectacularly nurtured with their Deep Blue project.

A further boon, to both the advancement of science and the international chess community, would be for IBM to enter Deep Blue into active competition against other elite grandmasters, such as Anand, Karpov, Kramnik, Ivanchuk, Short and Judith Polgar. If world chess organisers are reluctant to invite the computer, or if IBM itself is shy of taking on further challenges, then chess players and enthusiasts should energetically lobby both FIDE and IBM.

Of course, one infallible way of determining whether Deep Blue is now, in fact, the world's strongest chess player, or whether the sensational outcome of the match was mainly caused by Kasparov's poor psychological preparation (Anand, for example, in the German magazine *Der*

*Spiegel* accused Kasparov of treating the machine 'like God'), would be for Kasparov to challenge Deep Blue to a 20-game match with nothing less than his world title at stake. This would be a gauntlet that IBM dare not refuse without, justifiably, exposing themselves to charges of cowardice.

Deep Blue has won, but the suspicion remains that this was really Kasparov who lost. However, can it be said that Deep Blue has contributed anything new to our understanding of chess? In the first instance, one might legitimately describe Deep Blue's success as 'Bobby Fischer's revenge'. Famously, in 1972, the American grandmaster Bobby Fischer, brilliantly seized the world title from his Russian rival Boris Spassky, thus terminating 24 years of Soviet domination. A mere three years later, frustrated by Soviet-manipulated chess politicians, Fischer withdrew from chess, and left the World Championship open, once again, to Soviet hegemony. Now, the intellectual ghost of Bobby Fischer has been avenged, and American technology has defeated the direct lineal heir of Anatoly Karpov, the Soviet Champion, who directly benefited from Fischer's refusal to play.

Additionally, Deep Blue has injected a new element of discontinuity into chess strategy. The traditional 'well-made' game of chess follows a clear line: superior strategy nets an advantage in position, which permits the stronger side to finish off with a fine display of tactical pyrotechnics. Kasparov himself has won innumerable games of this type. Deep Blue, though, has eroded these certainties much, as in music, the sonata form of the classical symphonies of Haydn, Mozart, Beethoven and Brahms, was first tested

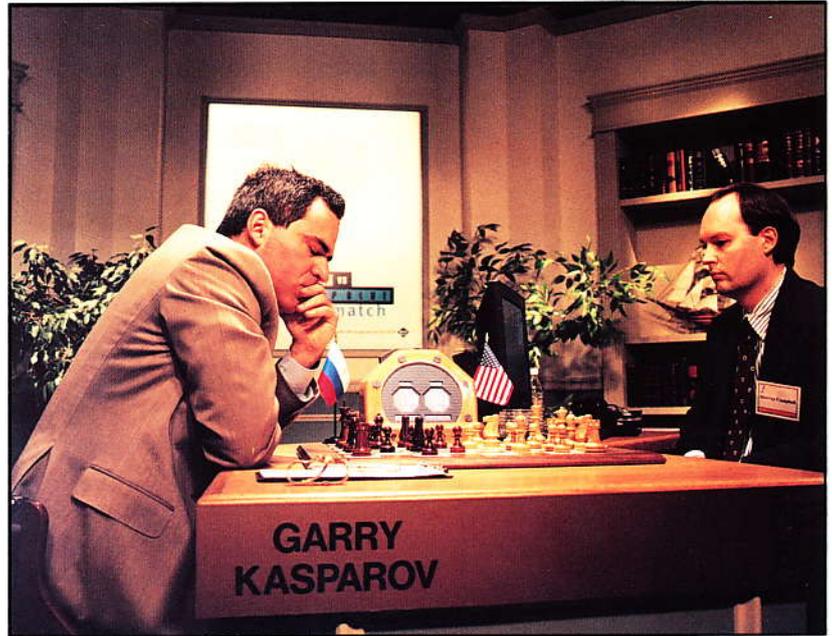
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**Deep Blue has injected a new element of discontinuity into chess strategy.**

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and stretched, almost to destruction, by Bruckner and Mahler; then annihilated and ultimately replaced by the simultaneous and competing discordances of Karlheinz Stockhausen's *Gruppen*, in which three separate orchestras surround the audience, and compete for attention. In much the same way, Deep Blue's tactical arsenal of defensive wizardry in precarious situations, has virtually enabled it to chop up the game into disparate sequences, where defeat is continually postponed by virtue of the machine's calculating excellence. This inability to impose a pattern, to dictate a pleasing strategic flow, was partly the function of some infelicitous opening choices by Kasparov, but also of Deep Blue's ability to keep bad positions in a state of flux. Assuredly, Kasparov's frustration at his inability to land a direct hit in Games three, four and five must have contributed massively to his psychic collapse in Game six.

In 1992, along with Tony Buzan and David Levy, I was one of the organisers of the first ever World Championship in any type of event between a man and a machine. This was the Draughts (Checkers) World Championship between the Chinook program, running on a Silicon Graphics machine, and the dominant figure in world checkers, US Champion Dr. Marion Tinsley. Tinsley won the match, so all was well, but withdrew from a replay held two years later in Boston. Even though the score was equal at that time, the rules in force dictated that Chinook be declared the new World Champion.



What was the reaction of the world checkers community to this novel and unexpected situation? It was lamentable. The best human was declared 'World Champion' by the authorities and governing bodies, while Chinook's title was demoted to that of 'Man-Machine World Champion'. Surely, as Star Trek's Mr Spock would have put it: 'Logic dictates' that if there is a human World Champion and a man vs. machine World Champion as well, then the latter must have defeated the former and must, therefore, be the real World Champion.

This sad state of affairs, where the world's best player, whether silicon- or carbon-based, has been sidelined, must

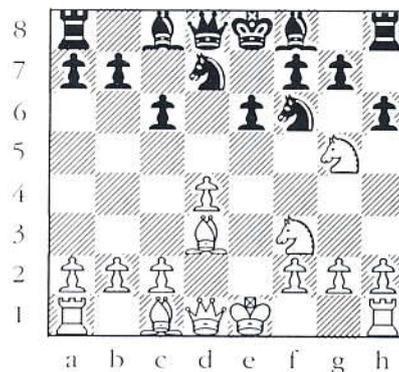


**...amidst all this talk of 'man versus machine' we must remember at all times that Deep Blue's victory is also a triumph for the human brain.**

never be allowed to exist in chess. If Deep Blue really is the best player, then we must accept all of its challenges, and it must accept the best of ours. If not, chess knowledge, interest and indeed truth, will atrophy. As Leonardo da Vinci, the man with the highest IQ in history put it: 'Iron rusts from disuse, water that does not flow, becomes stagnant, so it is with the human mind.'

Finally, amidst all this talk of 'man versus machine' we must remember at all times that Deep Blue's victory is also a triumph for the human brain. Deep Blue does not come from a machine planet – it is the product of American and Sino-American scientists and grandmasters. Lilliputians they may be, over the chessboard, in comparison with the Brobdignagian Colossus they have toppled, but in mental terms their collective intellectual achievement will go down in the record books of superlative human firsts.

**Deep Blue - Kasparov  
New York, Game 6, 1997  
Caro-Kann Defence  
1 e4 c6 2 d4 d5 3 Nc3 dxe4 4 Nxe4 Nd7 5 Ng5 Ngf6 6 Bd3 e6 7 N1f3 h6?!**



This move was condemned in the standard one volume openings reference work *Batsford Chess Openings* which I co-authored with Kasparov in 1989! The most reliable is 7 ... Bd6 as in Kasparov - Kamsky, Linares 1994.

**8 Nxe6**

This sacrifice gives White a strong attack, and Kasparov knew it.

**8 ... Qe7**

If 8 ... fxe6 9 Bg6+ Ke7 leads to an even worse traffic jam amongst the black pieces.

**9 0-0 fxe6**

And not 9 ... Qxe6 on account of 10 Re1 winning Black's queen.

**10 Bg6+ Kd8 11 Bf4 b5**

Black's problem here is that, although he is a piece ahead, his king is never safe.

**12 a4 Bb7**

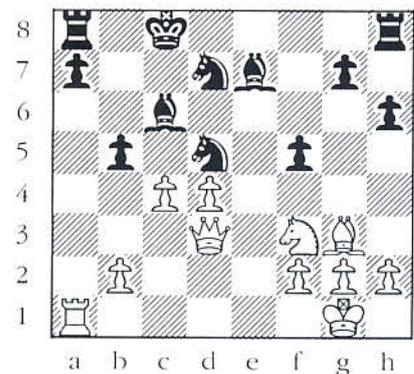
I think Black's last chance is 12 ... b4 to keep lines closed on the queenside.

**13 Re1 Nd5 14 Bg3 Kc8 15 axb5 cxb5**

**16 Qd3 Bc6 17 Bf5**

Trading rook and bishop for Black's queen.

**17 ... exf5 18 Rxe7 Bxe7 19 c4**



**Black resigns**

Black's position has been reduced to rubble, e.g. 19 ... Nb4 20 Qxf5 bxc4 21 Ne5 Bf6 22 Nxd7 Bxd7 23 Qa5.

This final game against Deep Blue was a disaster for Kasparov. Everyone blamed his opening. However, is that the full story? In October 1996 at Jena in Germany grandmaster Gennadi Timoshenko, formerly Garry Kasparov's second, contested a match against a combination of the Fritz computer program and human minder called Ingo Althöfer. The match

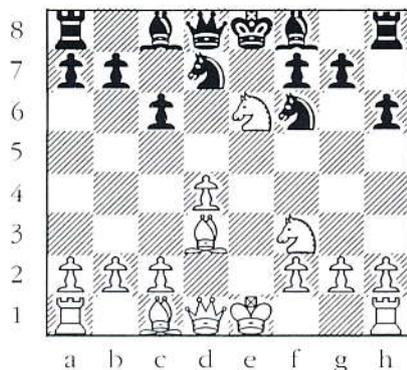
**Man vs. Machine, New York 1997**

	1	2	3	4	5	6	
<b>Deep Blue</b>	0	1	½	½	½	1	<b>3½</b>
<b>Kasparov</b>	1	0	½	½	½	0	<b>2½</b>

was ultimately won by the symbiotic Fritz/Althöfer tandem by 4½-3½. In one game of this match, Timoshenko risked exactly the same variation, as Black, with which Kasparov suffered such a débâcle in game six.

In the *International Computer Chess Association Journal* of March 1997, Timoshenko published his game and his detailed conclusions on the sacrifice which included the verdict: 'After the knight sacrifice, Black has enough possibilities for defence.' It is surprising that Kasparov's preparation should have overlooked Timoshenko's conclusions in this prime source for information on computer advances. And it is even more surprising that Frederic Friedel, a developer of Fritz and subscriber to the computer journal, as well as being Kasparov's adviser on computer affairs, should not have drawn Kasparov's attention to this article, if Kasparov was planning to defend with the Caro-Kann.

Broadly speaking, Timoshenko writes that the position after 7 ... h6, contrary to the initial reaction of all the experts, myself included, is, in fact, defensible for Black. The problems came later. Here is the first critical position.



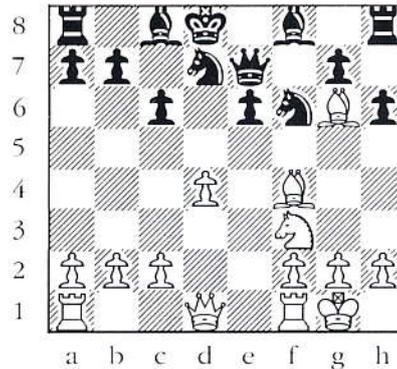
First of all, the early alternative 8 ... fxe6 9 Bg6+ Ke7 is not nearly as bad as Kasparov must have believed it to be.

Timoshenko's article quotes none less than Anatoly Karpov as giving 10 0-0 Qc7 11 Re1 Kd8 12 c4 (or 12 Rxe6 Bd6 13 Re1 Nf8 14 Bd3 Bg4 which is better for Black) 12 ... Bb4 13 Re2 Nf8 14 Ne5 Nxd6 15 Nxd6 Re8 16 c5 Qf7! 17 Ne5 Qh5 18 Nc4 b5 with Black on top. This turns out to be analysis by the Peruvian grandmaster Granda Zuniga from his Black win against Patrick Wolff at New York in 1992.

Timoshenko describes this whole variation as quite unclear; a possible improvement for White is 11 c4 Kd8 12

Qe2 Bd6 13 Rd1 Nf8 14 Bc2 as in Fogarasi-Szabolsci, Hungary 1995, though this game ended in a draw.

The next critical moment occurred on Black's 11th move.

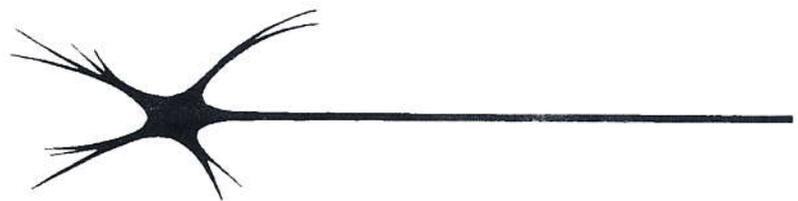


Here Kasparov played 11 ... b5. Fritz/Althöfer-Timoshenko, Jena 1996, continued

**11 ... Nd5 12 Bg3 Qb4 13 Qb1 Ne7 14 c3 Qa5 15 Bh4 Kc7 16 Bg3+ Kd8 17 Bh4 Kc7** with equality.

Of course, White's 13th move novelty deviates from the most dangerous theoretical tries, but Timoshenko suggests that there is an answer for everything. For example, 13 Qe2 Be7 14 c4 N5b6 15 b3 Bf6 16 Rad1 Qe7 17 Rfe1 with compensation for the knight, but no clear win. Alternatively, 13 Re1 Be7 14 Qe2 Bf6 15 c4 Ne7 16 a3 Qb3 17 Bd3. This is Chandler-Hübner, Biel 1987, but here Timoshenko quotes analysis by the Australian grandmaster Ian Rogers suggesting that 17 ... Nf8 18 Rad1 Bd7 19 Ne5 Be8 is still playable.

If Kasparov had been aware of Timoshenko's article and had properly prepared his defence, it might well have proved that allowing, indeed provoking, White's sacrifice on move eight could have turned out to be a masterstroke, leading to an unbalanced position, in which victory for both sides was still possible. At the very least, someone in Kasparov's camp should have regarded the ICCA Journal as required reading and ensured that Kasparov was cognisant of all its most recent discoveries.



# MEMORY MATTERS

This series of articles, by Dr Sue Whiting, GMM and reigning Ladies World Memory Champion, is aimed at those of you who are either new to memory systems or need a little extra practice before jumping in at the deep end and using the Major System to memorise encyclopaedic knowledge. In the next few issues of Synapsia, Sue will not only be continuing her articles based on her talk at the Brain Club conference last year covering advanced memory systems, but will also be continuing this other, complementary series on the more basic systems. Hopefully, with this approach, there will be something for everyone. Sue welcomes your feedback on both of these aspects.

Before we start looking at memory systems, try this test on yourself. Look at this list of items you need from the supermarket and try to memorise it. Give yourself a minute or so.

Hairbrush; cake; icing; toasted flaked almonds; candles; streamers; Coca-Cola; serviettes; crisps

Now cover up the list and test yourself. If you got it perfect, give yourself a pat on the back. You are probably using some type of memory system or other. If it wasn't totally correct then read on – you will soon learn a technique which will not only help you learn it perfectly but also be fun to use!

Any person good at memorising items uses some sort of memory system – either consciously or subconsciously. And all memory systems have two main ingredients: visualisation and association. So let's look at each of these in some detail.

## Visualisation

### Basic Visualisation exercise

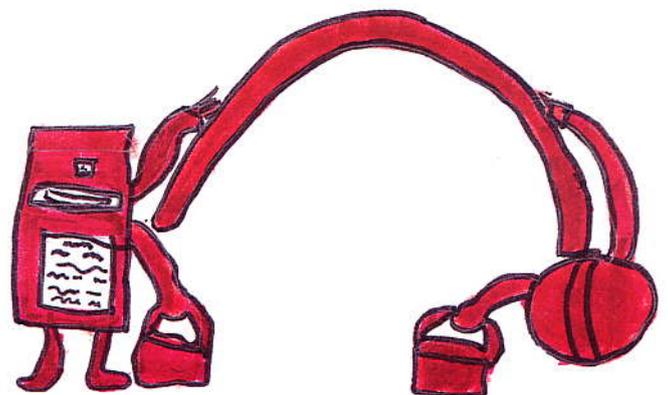
Let's start with the most basic sense that people use when visualising – eyesight. This can often be the hardest sense for some people to use, so we will have a little fun with some exercises and see how you get on.

Can you visualise a rainbow? (fig 1) Close your eyes and try. Can you 'see' the beautiful top arc of magenta red soaring through the sky? If you are having problems, pretend to paint the colour red in an imaginary arc in the sky. 'Dip' your paintbrush into an imaginary pot of red paint, then paint a beautiful arc across the sky, trying not to drip too much paint in the process!

If you are still having problems, there are two other things you could try in order to 'see' the colour red in your mind. You could just physically look at any red object, then close your eyes and you will probably 'see' it, albeit a little fuzzily, in your mind. Try 'drawing' around its actual shape as this may help to concentrate your mind. If that doesn't work, even after a little practice, just keep your eyes shut and think of a familiar red-coloured object. Perhaps a red ball or even a post-box. An image should eventually come, even if it is for a fleeting second (as you practise you will be able to hold the image for longer). If you dream at night, all these images are there in your brain anyway – all you are trying to do is to call them up at will. It's really quite simple once you have acquired the technique. When you have actually got that red object in your mind, you can then use it to 'paint' the red arc of the rainbow! (fig 2)

If you find this easy – great!

below left: Fig 1  
below right: Fig 2



If it's hard – don't despair. You are actually very fortunate in finding a part of your mind that you haven't used much before in the past. By improving this aspect of your visualisation powers, you will improve your whole mind. Don't give up! Six years ago, I thought that I would never be able to 'see' objects in my mind, but I can assure you that with practice it does eventually come.

Once you are managing to see a red arc of the rainbow, try the next colour – orange. If you have persevered with red then orange should be a little easier. Think of an orange that you eat if you are having problems. Likewise, work through the whole spectrum, i.e. yellow, green, blue and purple. You'll have a great deal of fun with this if you use a squawking yellow chick to paint the yellow arc! (fig 3) Enjoy it! Laugh at the absurdity of it! To restore confidence, if you've had problems, now try white, black and grey. I often find these colours a little easier.

### Visualisation Exercise using all of your Senses

Seeing is only one of our five senses – the others being hearing, touching, smelling and tasting. Just as to enjoy life to the full we utilise all of our senses, so in visualisation we have to use all our senses. If we only 'see' things in our minds they will not be as memorable as when we incorporate all of our senses at the same time to enhance the image. Imagine an elephant: it is quite an easy image to conjure up – concentrate on the colour and the trunk if you are having problems. However, if you imagine yourself stroking it, probably on its trunk, and noticing its smell, you will have a far more memorable picture in your mind. As far as our minds are concerned, it will appear much more like a real-life situation if all the senses are involved. So let's do a further exercise.

Imagine a bun or a piece of your favourite type of cake. (fig 4)

Can you see it? Shut your eyes momentarily if that helps. Now touch it, gently squeeze it and smell it. Imagine putting it in your mouth and biting into that delicious sponginess. Does it taste good? If you have done this exercise well, your mouth is probably watering by now.

If you have found this section difficult then try some more exercises of your own. Visualise yourself drinking a cup of coffee or wine, or perhaps indulge in eating a piece of chocolate. If you succeed in bringing all your senses into play your

mouth will start watering. If you do just rely on sight alone, your visualisation powers will never reach their potential. You could make this into a game with your family or like-minded friends. Just take it in turns to choose an object and then describe it. I am always staggered at the visualisation powers of my children!

### Association

Association is the fundamental ingredient of every single memory system I know. The basic idea is that when you think of one thing, your mind will also automatically think of another thing which you have associated with the first. The mind will actually do this quite naturally by itself. How often have you walked past a postbox and thought of a letter you have written yet forgotten to post? Or perhaps you think of a letter you ought to write? Going past a baker's shop, how often do you think of a meal? Your mind is making these connections all the time.

Memory systems basically associate something you want to remember with something you already know! It's as simple as that. All systems are based on this common principle, although they do the associations in different ways. You can, therefore, see how powerful these systems are since they are just using the mind in a way it wants to operate!

### Storytelling

What is it that every child wants before going to sleep at night, before the final kiss and cuddle?

Story after story after story until both Mum and Dad are worn out! Fortunately they soon learn to read for themselves, which lets the poor exhausted parents off the hook! Adults also crave stories, even reaching back into history before man had discovered how to read and write and so had to tell them from memory. Nowadays, as well as reading, to satisfy our urge for stories we will also watch television, films and listen to the radio.

The conclusion we can draw from this is that man, at all levels, has an insatiable thirst for storytelling.

Surely then a most satisfactory memory system that we could use would be to make a story around some facts we wish to memorise. It would appeal very much to the part of the brain which enjoys storytelling. It would certainly be fun and far more interesting than learning the black and white facts in isolation. If you were to drift off and daydream you would proba-

bly end up with an even better story with which to memorise the data. What a change from the way most of us were taught to memorise items at school!

**The LINK System**

There is one very basic memory system which does actually use precisely this method for memorising items: the LINK system, which is usually used when you want to memorise facts in a particular sequence. All that you do is to make up a story with the facts you want to learn. One of the best illustrations of this system which I have come across is by Tony Buzan who uses precisely this method to memorise the order of the planets in the solar system. Since many of you will have already read his books I shan't go into detail here but just refer you to *Master Your Memory*, page 13.

How do you make this so memorable? First, it has a pretty good story line; but just as importantly it has action, colour and you have used most, if not all, of your senses. Your mind, therefore, thinks it has all occurred. As long as you have put enough effort into it, and reviewed it at appropriate intervals, it will always stay in your memory.

I have often used this method for memorising a shopping list since it is quite a useful thing to practise on. Once you are familiar with the practicalities of it, through this everyday usage, you should be able to find more useful, long-term things to memorise. Of course in this instance you would not want to commit a shopping list to long-term memory, so I warn you not to regale too many people with your crazy story after you have done your shopping – I made this mistake with one of the first shopping lists I ever memorised and six years later I still have part of it in my long-term memory! So let's return to the shopping list I gave you at the beginning. (Test yourself again before referring back to it!)

We need to start with a link between the hairbrush and cake. (fig 5) You must try to get an interaction (the crazier the better) and try to use as many of your senses as possible. My ten-year-old daughter suggested that we change the hairbrush into a prickly, icky hedgehog (do you remember Andy Pandy?) who starts to eat an enormous cake. 'See' as much of it as you can, 'touch'

the hedgehog with your fingers, 'hear' the hedgehog munching and what about the smell and taste of the cake?

If you have gone through this thought process then the first two items should be firmly in your mind now. Next link up the icing. I'd have it dripping down the cake – extremely sticky with that sweet smell and taste. Mine is actually a brilliant white, but don't let me influence you too much. My ten-year-old daughter's is pale green!

On top of the icing are almonds. 'See' the contrast between the shiny icing and the light brown of the flaked almond. Is your mouth watering yet?

Suddenly, candles are thrust through each of the almonds (have the almonds splintered?). To make it more vivid, you could imagine yourself actually feeling your arm making the necessary movement. Doesn't the wax seem strange to the touch. What are the colours of your candles? What sound is there? Are you going to light them with a match? If so, are the flames flickering? Can you hear the sizzling match, feel the heat, and smell the acrid smoke?

Link this next to streamers. I immediately 'see' red and yellow streamers now instead of the flames, but if you have thought of something else then use your idea (as long as it isn't wishy-washy!).

Coca-Cola ...? My streamers are rather violent ones which knock over a bottle of coke. CRASH! – a brownish, sticky, pungent effervescent puddle appears.

Paper serviettes (boring white? bright red? patterned with *Pocahontas* or maybe *The Lion King*? – make it vivid somehow) magically appear to wipe up the mess while potato crisps (normal or crinkly? perfectly baked or burnt at the edges? what flavour and smell do you have?) gently float down from the sky and land on the soggy, stained serviettes.



Fig 5



Fig 3

**Practice Makes Perfect!**

To master this technique all you need to do is to practice.

1. Try to go backwards with those shopping lists – you'll probably surprise yourself.
2. Try memorising at least one shopping list a week. By the time the next *Synapsia* is published you should have been able to have memorised about 12 lists – have a minimum of four items in each of your lists and go up to about 10 (or more as you gain confidence).
3. As a start, here are two other lists to memorise. These are not shopping lists, but their relevance will become apparent in my next article. Please send me your own story lines. Any which I print in the next issue will receive a £5 book token, so get cracking!

1. pen; 2. swan; 3. heart; 4. yacht; 5. hook; 6. elephant's trunk; 7. cliff; 8. snowman; 9. pipe; 10. bat and ball

1. bun; 2. shoe; 3. tree; 4. door; 5. hive; 6. sticks; 7. heaven; 8. gate; 9. wine; 10. hen

4. If you have time, sit down with a friend and give each other lists of words to learn made up of any everyday objects. Aim for about 10 items. Happy visualising!

Now link this to the shop. Perhaps you can 'see' yourself pushing an empty trolley and a hedgehog jumps in. If you have visualised it properly you should remember everything as soon as you actually reach the place in the supermarket where the hedgehog landed. You must, however, review it a few times before you go shopping or you will tend to lose it. After you have completed your shopping, stop thinking of it and start planning the next shopping list. Let's try another.

Washing up liquid; coffee; milk; cherries; apples; cheese; Quality Street sweets; walnuts in their shells; chocolate-coated digestive biscuits; raisins

Have a go yourself before I give you my suggestions.

I would again start off with my shopping trolley (fig 6), the bottom of which is covered in bubbles, some of which are quite beautiful with the shimmering rainbow colours (we've had some good practice at visualising these colours!).

Fig 4



Floating on these is a jar of coffee, but when I open it, to smell that delicious coffee aroma, out shoots a spray of milk – totally drenching me.

This spray of milk develops into a waterfall and falling down it are cherries (black or red? large or small? how many are joined by their stalks?).

The cherries suddenly spit their pips out. As they fly through the air, they change into apples (red, green, russet? large or small?) which crash-land on a huge Brie (can't you just taste that delicious white crust and the creamy interior!). Out of the craters (can you see all the fine cracks in the white crust?) Quality Street sweets come flying, using the wrapping paper, where it is twisted at the end, for their wings (shiny purple, red orange...).

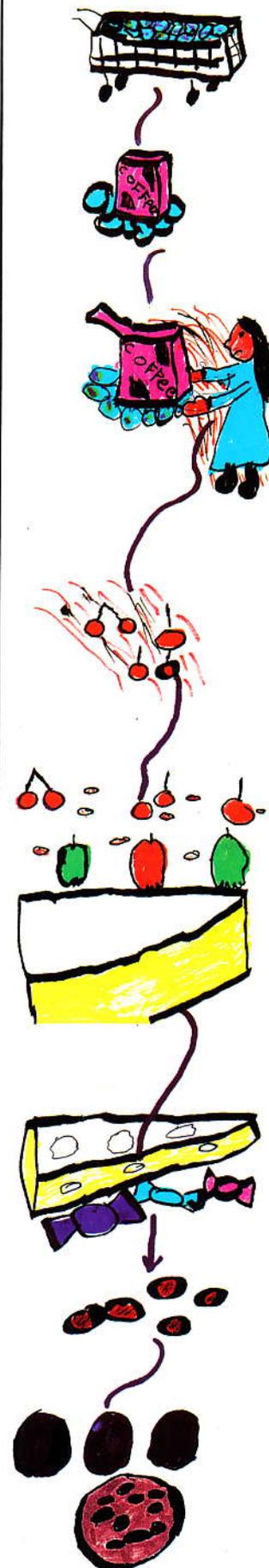
Walnuts (can you feel the shells with all their detail?) drop out of these sweets and when they crash onto the ground they burst open to reveal chocolate digestive biscuits, which roll along the ground like wheels. Looking closer at these chocolate biscuits, you notice that they are pitted with raisins.

**Summary**

All you need to do is to associate one object with the subsequent one using all your senses. The crazier the association the better. You could just memorise your shopping trolley with each thing superimposed on top of the previous one, but you would soon become very bored and it certainly would not be as memorable!

A special thank you to my daughters Carolyn (11 years) and Helen (10) for all their lovely illustrations for this article!

Fig 6



# MIND MAPPING EXPLAINED

**A complete guide to get you started on this revolutionary concept  
by Vanda North.**

## What is a Mind Map?

A Mind Map is a powerful graphic technique which 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.

Originated in the late 1960s by Tony Buzan, Mind Maps are now used by millions of people around the world – from the ages of 5 to 105 – whenever they wish to use their brains more efficiently.

## The Laws of Mind Mapping

1. 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.
2. Use images, symbols, codes and dimension throughout your Mind Map.
3. Select key words and print – using capitals or lower case letters.
4. Each word/image must stand alone, on its own line.
5. The lines must be connected, starting from the central image. In the

centre, the lines are thicker, organic and flowing, becoming thinner as they radiate outwards.

6. Make the lines the same length as the word/image.
7. Use colours – your own code – throughout the Mind Map.
8. Develop your own personal style of Mind Mapping.
9. Use emphasis and show associations between different related topics in your Mind Map.
10. Keep the Mind Map clear by using numerical order or outlines to surround your branches.

## How to Mind Map

1. Place a large white sheet of paper horizontally, or use a Mind Map pad.
2. Gather a selection of coloured pens, ranging from thin nib to highlighter.
3. Select the topic, problem or subject to be Mind Mapped. This will be the basis of your central image.
4. Gather any materials, research or additional information that is needed, so that you have all the facts at your fingertips. Now start to draw in the centre of your page.
5. Start in the centre with an unframed

### Similar 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.
- \* Be enjoyable to look at, read, muse over and remember.

image – approximately 1½ inches (3cm) high and wide for A4 and 4 inches (10cm) for A3.

- 6. Use dimension, expression and at least three colours in the central image in order to attract attention and aid memory.
- 7. Make the branches closest to the centre thick, attached to the image, and 'wavy' (organic). Place the Basic Ordering Ideas (BOIs) or chapter headings on those branches.
- 8. Branch thinner lines off the end of the appropriate BOI in order to hold supporting data.

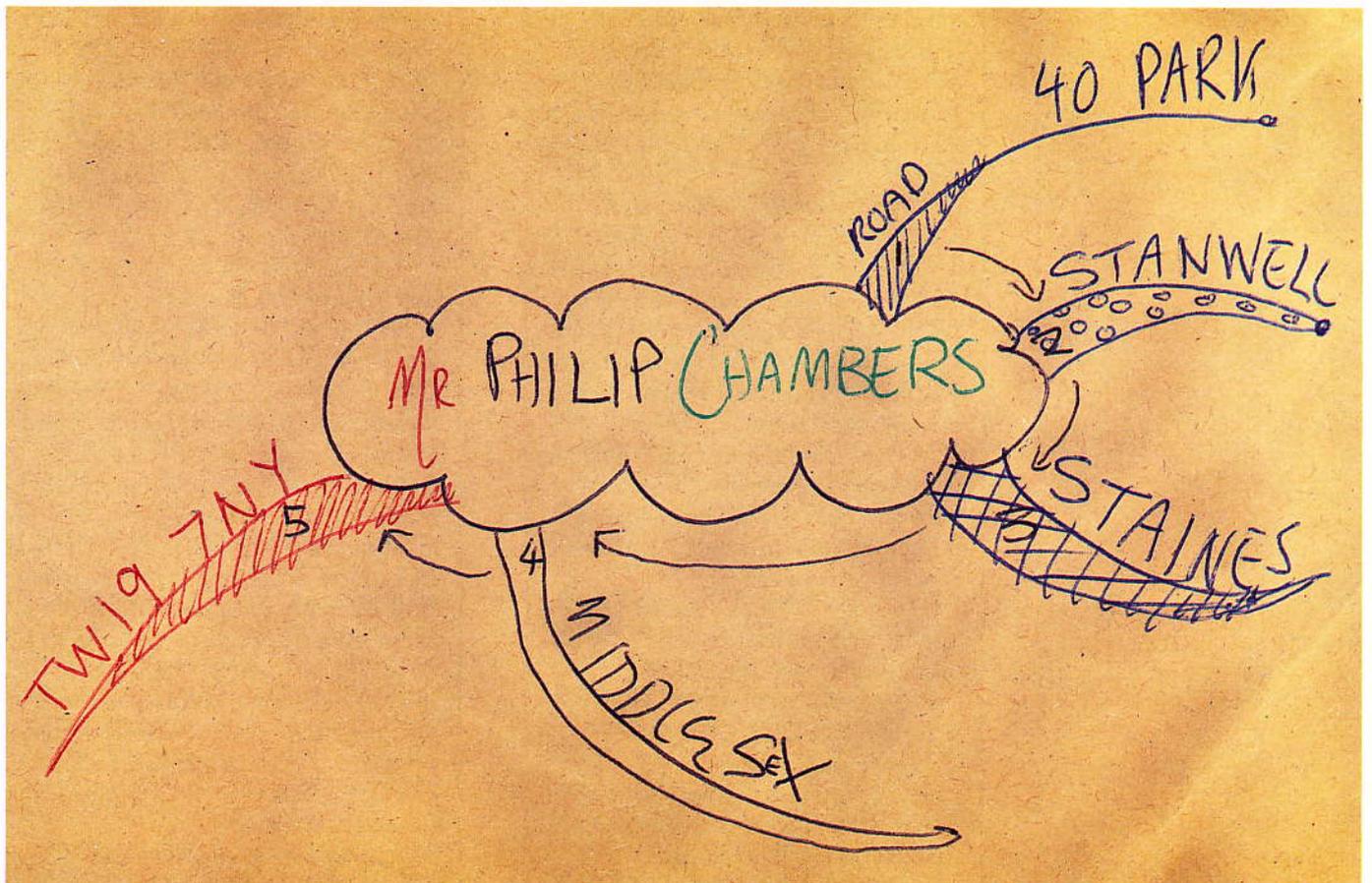
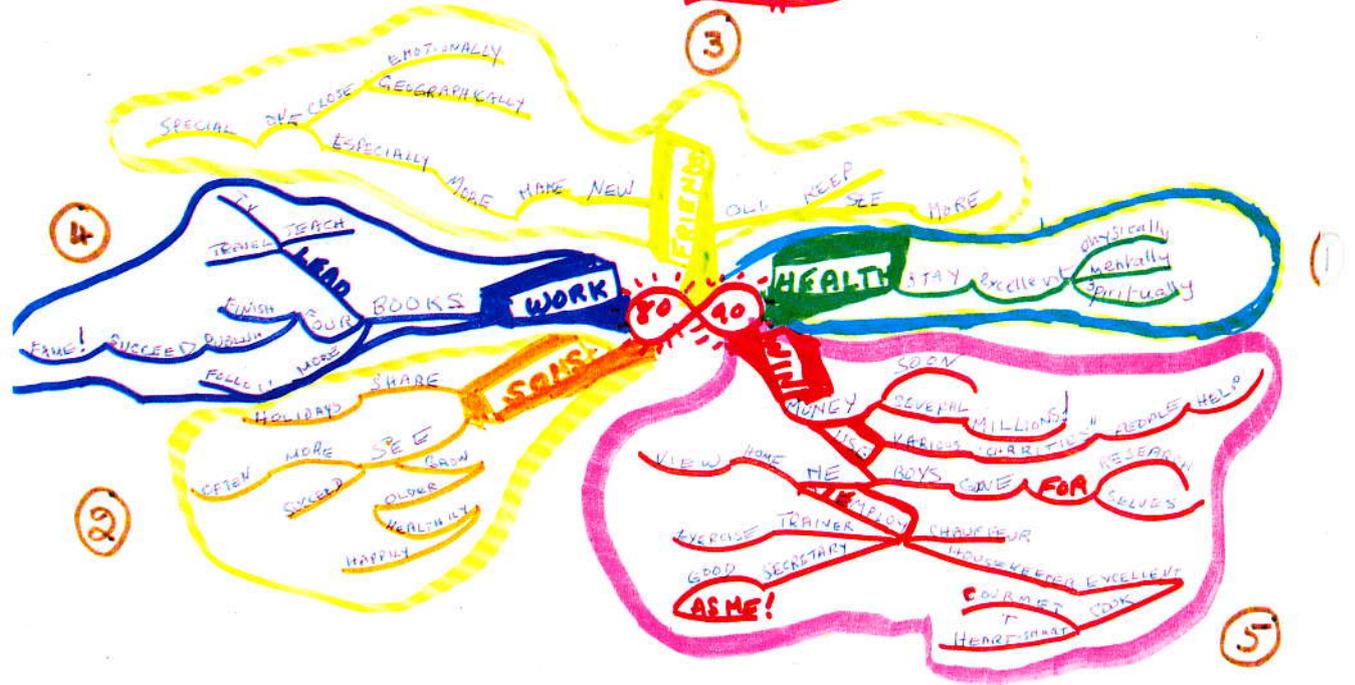
- 9. Use images wherever you find it is possible.
- 10. The image or word should always sit on a line of the same length.
- 11. Use different colours as your own special code to show people, places, topics, themes, dates and to make the Mind Map more attractive visually.
- 12. Capture all your ideas, or those that others have contributed, then edit, reorganise, make more beautiful, elaborate, or clarify as a second and yet further advanced stage of thinking.

The Mind Map on the following page, with the central image *Mission Possible*, is by Patrick Mayfield. It is based on the book *Mission Possible* by Kenneth Blanchard and Terry Wighorn.

<b>Uses and Benefits of Mind Mapping</b>	
<b>Uses</b>	<b>Benefits</b>
1. <i>Learning</i>	Reduce those 'tons of work'. Feel good about study, review and exams. Develop confidence in your learning abilities.
2. <i>Overviewing</i>	See the whole picture, the global overview, at once. Understand the links and connections.
3. <i>Concentrating</i>	Focus on the task for better results.
4. <i>Memorising</i>	Easy recall. 'See' the information in your mind's eye.
5. <i>Organising</i>	Parties, holidays, projects, etc. Make it make sense to you.
6. <i>Presenting</i>	Speeches become clear, relaxed and alive. You can be at your best.
7. <i>Communicating</i>	Communicate in all forms with clarity and conciseness.
8. <i>Planning</i>	Orchestrate all aspects, from beginning to end, on one piece of paper.
9. <i>Meetings</i>	From planning to agenda, chairing, taking the minutes ... these jobs can be completed with speed and efficiency.
10. <i>Training</i>	From preparation to presentation, make the job easier.
11. <i>Thinking</i>	The Mind Map will become a concrete record of your thoughts at any stage of the process.
12. <i>Negotiating</i>	All the issues, your position and manoeuvrability on one sheet.
13. <i>Brain Blooming</i>	The new brain-storming, in which more thoughts are generated and appropriately assessed. It is often assumed that the greater the quantity of ideas generated, the more the quality declines. In fact, the reverse is true. <i>The more you generate ideas and the greater the quantity, the more the potential quality increases.</i> This is a key lesson in understanding the nature of your own creativity.
14. <i>Lectures</i>	When you attend a lecture, use a Mind Map to keep a vivid visual memento of it.



# Jean's 80th years - hopes & dreams



# BRAIN CLUB NEWS

## **Mind Map Competitions, the Conference and the Internet**

### **World Wide Brain Club**

*The following article from Ian Docherty explains his aims and ideas for presenting the Brain Club on the World Wide Web. In the next issue, Ian will identify many other areas of interest on the web for the brain enthusiast.*

My first port of call when surfing on the World Wide Web, and I have to admit to being biased here, is the 'World Wide Brain Club'. This is a Web site written and maintained by myself.

The World Wide Brain Club (or WWBC) is an experiment in creating a worldwide community of people interested in learning how to learn and be creative. The Web site provides information on Mind Maps, memory, study techniques and creativity. There is a regularly updated news section where recent findings to do with learning and the brain are presented in an easy to understand manner.

A large section describes memory and creativity techniques including Mind Maps, mnemonics and memorisation. Lana Israel has kindly donated a Mind Map which demonstrates the basic principles in Mind Map construction. Other people have also donated work to include in the Mind Map Gallery.

To help members join in a wider community of like-minded people there is a diary section which gives dates and venues for chess, go, training events and Brain Club meetings worldwide. If you would like to see your club meetings or training events published here then please send me the details.

WWBC members can exchange ideas in the 'talk' section. Here members can pose questions or provide answers to other members questions. A sample of recent questions are:

*How can I learn orchestral music scores?*

*How can I memorise equations for my maths exams?*

*Can Mind Maps help someone with short-term memory loss due to brain injury?*

*Help! I can't concentrate.*

If you have questions of your own, or can provide answers to these questions, then please feel free to drop in...

The WWBC started accepting membership in February this year and by the end of May there were already over 960 members. All you need to do to join the WWBC is to provide your email address and you will receive a short newsletter each month informing you of any significant additions to the WWBC and any events or news related to memory, learning or creativity. You can register by filling in a simple form on the front page of the Web site.

The World Wide Brain Club can be found at:

<http://www.silkwood.co.uk/wwbc>

### **1997 Brain Club Conference**

*Michael Tipper reports on another successful day.*

Ask yourself this question – am I a success? Before you can honestly answer you must have an idea in your own mind about what success means to you. Now having spent several minutes on that problem, STOP! I have the pleasure to inform you that you are a success and I haven't even met you. How do I know? Well, if like many other members of the Brain Club, you attended this year's Brain Club Conference, you would have discovered that the brain is a success mechanism and as you have a brain, you are a success. Congratulations.

The theme of this year's conference was Synaptic Success and, as ever, the Brain Club put together an exciting collection of speakers to convey this message. In his keynote address, Tony Buzan highlighted the world's raised awareness of the importance of the brain and its contribution to society. Organisations especially are now starting to realise the importance of Intellectual Capital and, as such, are investing in it (one European organisation to the tune of 25 million Swiss Francs). Of course this is nothing new to Brain Club members but, to prove the point, delegates were invited to defend the brain and, in a very short space of time, an impressive case to support the motion that the brain is fundamentally creative was made.

A Brain Club Conference would be in-

complete without the energetic Vanda North and to continue the theme of success, she described her efforts, together with some of the setbacks she encountered, to set up Buzan Centres. Clearly the moral of her story was that success is all about commitment to a strongly imagined ideal backed up with persistence together with having fun.

Douglas Brand is a Chief Superintendent with the South Yorkshire Police Force and, at 6'9", is not a man to argue with. His view of success is that it is ordinary people doing extraordinary things. Using examples encountered in the police force together with some personal experiences, Douglas cited the incredible power of association as a key element in success. He enthralled the conference but it was his eloquence and not his stature that kept delegates captivated. Not for the last time during the conference, delegates were challenged by the question: 'What are you going to do to make your life a success?'

Can you create your own good luck? Raymond Keene certainly seems to think so and listening to the circumstances surrounding his efforts to stage the USSR versus the Rest of the World match in 1984, you would be hard pushed to disagree. So, how do you successfully rearrange the most important chess fixture of the time from Belgrade to London, in seven days, starting without sponsorship, funding, a venue or visas for the Russian team? Commitment and a belief that you are going to do it (together with Raymond's natural organisational flair, of course). The Goethe quote at the end of this article goes a long way to explain that mysterious quality some would describe as luck that often has a helping hand in these matters. Interestingly enough, three separate speakers who prepared their talks independently all referred to this principle, which is described by Tony and Raymond in the *Book of Genius* as 'Goethendipity'.

On a lighter note, the multi-talented James Longworth resurrected the after-lunch graveyard slot with a dazzling display of wit, enthusiasm and a marigold glove. A former Junior World Memory Champion, James entertained the conference with humour, music, poetry, balloons and a youthful exuberance that was infectious. Watch out for James in the future. It is difficult to know which of his many talents will bring him onto the world stage but no doubt we will hear his

name again.

During the afternoon, talks following the theme of success were given by Phillip Chambers, Sue Whiting and Warren Day. Following an excellent talk by Jane Mitchell on the successful use of Mind Maps by children with learning differences (a more appropriate term than 'difficulties').

Details of the forthcoming Mind Sports Olympiad to be held at the Royal Festival Hall in August were also presented. This is going to be an exciting event and will certainly mark a turning point in the realisation, understanding and application of the principles of Mental Literacy.

In an award ceremony to close the conference and to continue his theme of ordinary people doing extraordinary things, Douglas Brand, on behalf of the Brain Club, presented an award to Christine Barnes.

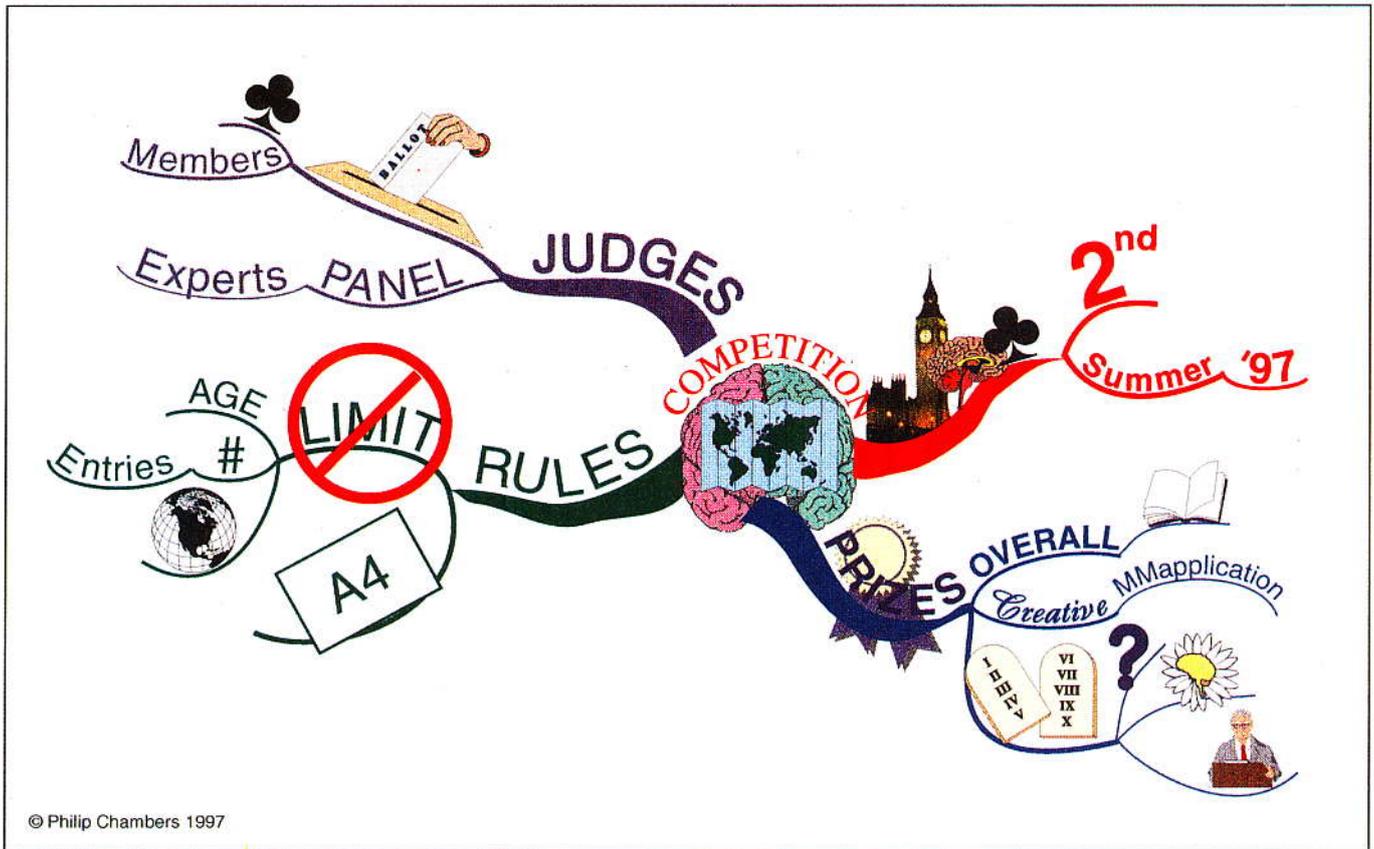
So, another year and another conference has come and gone. To close I shall ask you the question 'what are you going to do to make your life a success?' Douglas Brand gave credence to the incredible power of association, so if you have any idea what you want to do with your life, come and associate with fellow members of the Brain Club at next year's conference and get a shot of inspiration.

*'Until one is committed there is hesitancy, a chance to draw back. Always ineffectiveness concerning all acts of initiative and creation. There is one elementary proof - the ignorance of which kills countless ideas and splendid plans. This is, that the moment one definitely commits oneself, then providence moves too. All sorts of things occur to help one, that would never otherwise have occurred. A whole stream of events issues from the decision, raising in one's favour all manner of unforeseen incidents and material assistance, which no man could have dreamed would have come his way. Whatever you can do or dream you can begin it. Boldness has genius, power and magic in it, begin it now.'* - Johann Wolfgang von Goethe

### **The Second Annual Brain Club Mind Mapping Competition**

*Philip Chambers is calling on all Mind Mappers!*

Last year saw the birth of the London Brain Club Annual Mind Mapping Competition (see *Synapsia*, Spring 1996). The eight entries received formed the nucleus of the London Mind Map Library, a resource that does not just give information



Above: Rules for the Mind Map competition.

Below: Douglas Brand at the Brain Club Conference.



but is also a source of inspiration, providing shining examples for budding Mind Mappers. Since its creation it has grown fourfold to a grand total of 32 Mind Maps.

This year there are a few changes to the rules with more chances to win! Three prizes will be awarded: one overall prize decided by the votes of club members plus two special prizes. These will be awarded by a panel of experts including licensed Buzan Radiant Thinking Instructors and last year's winner, Michael Roman-Pintilie. The first of these special prizes will be for the most creative use of Mind Mapping, and the second for the entry that most closely follows the Laws of Mind Mapping. (For a reminder of the laws, please consult the Mind Map above).

There is no limit to age, geographical location or the number of entries that can be submitted. The only restriction is that you must use A4 paper. Like last year, the emphasis will be on Mind Maps of books. This will form the main category, but the two special prize categories will be open to Mind Maps of any subject you like and for any purpose. For example, notes from a lecture, a 'Brain Bloom' for generating ideas, in fact anything your imagination can conceive! The only limit is your creativity!

So, dust off your copy of *The Mind Map Book* and get out your coloured pens. We await your masterpieces!

Entries should be sent to Philip Chambers, 40 Park Road, Stanwell, Staines, Middlesex, TW19 7NY. To arrive no later than 15 September.

For details of how to use the Mind Map Library and a list of available Mind Maps, send an SAE to the above address or e-mail:

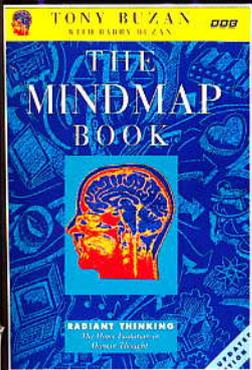
p.b.chambers@stanwell.demon.co.uk

**More Mind Mapping**

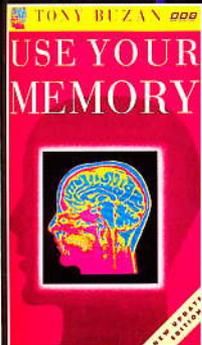
Anne Jones set another Mind Mapping challenge for her students at Regent College: to enter a Mind Map competition. About 20 students put on their thinking caps. The judges, Shirley Clooney (from WH Smith and organiser of Race for Opportunities) and Mary Tovey, chose Jayesh Patel as the overall winner. Other prizes went to Mahrenisha Patel and Anisha Patel for best pair entry, while Lesley McKemey won the award for staff and governors. The idea of the competition was to encourage students to use Mind Mapping to help with revision.



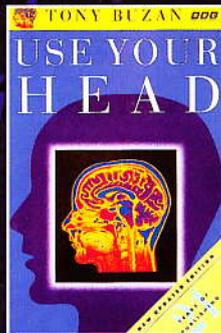
James Longworth at the Brain Club Conference.



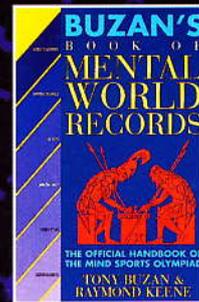
Tony Buzan with Barry Buzan  
*The Mindmap Book* P/B £14.99  
ISBN 0-563-37101-3



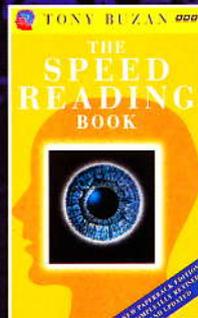
Tony Buzan  
*Use Your Memory* £7.99  
ISBN 0-563-37102-1



Tony Buzan  
*Use Your Head* £7.99  
ISBN 0-563-37103-X



Tony Buzan and Raymond Keene  
*Book of Mental World Records* £4.99  
ISBN 1-874374-06-6



Tony Buzan  
*The Speed Reading Book* £7.99  
ISBN 0-563-38312-7

# Improve your Mental Powers

Tony Buzan is the President of The Brain Foundation, Founder of The Brain Trust and the Use Your Head Clubs, and the creator of the concept of Mental Literacy. His books have been translated into twenty languages and published in fifty countries and his classic BBC Book *Use Your Head* has surpassed worldwide sales of a million.

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## ARE WOMEN RIGHT- OR LEFT-BRAIN DOMINATED?

**Caroline Lawrence**

We all know about the division of the brain into right and left hemispheres, and of the attributes generally associated with each.

The right (or imaginative) hemisphere of the brain has often been dubbed 'feminine' and the left (or logical) side of the brain 'masculine'. For example, in her seminal book *Drawing on the Right Side of the Brain*, Betty Edwards lists characteristics associated with the two hemispheres of the brain. Under the creative right-brain, she lists *yin*, unconscious, emotion and feminine. She places *yang*, conscious, reason and masculine with the academic left-brain.

When explaining left- and right-brain functions to my students, I often use an analogy from *Star Trek: The Next Generation*. I tell them that Deanna Troi, the empathic 'Betazoid' counsellor who deals with the subconscious and emotions, is like the intuitive right-brain. Data, on the other hand, is like the rational left-brain: good with logic, numbers and linear reasoning. Deanna, of course, is a woman and although Data is an android, he is a very masculine one.

I had always accepted this tidy classification quite happily until one of my students remarked, 'Of course, men must be

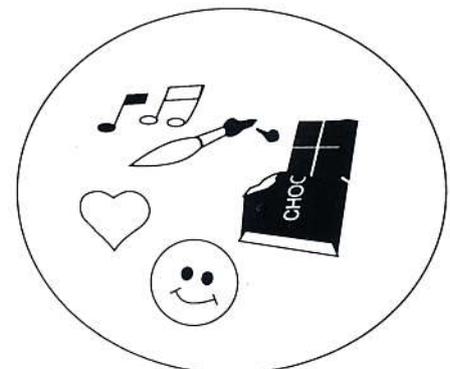
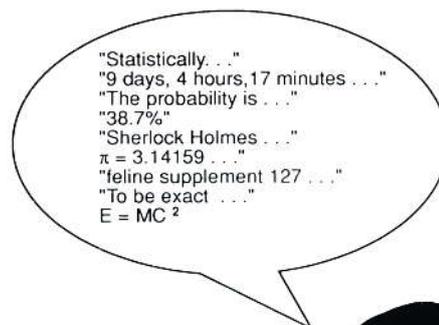
right-brain dominated and women mainly left-brain dominated. After all, women talk more than men, and 99% of the greatest artists have been men.'

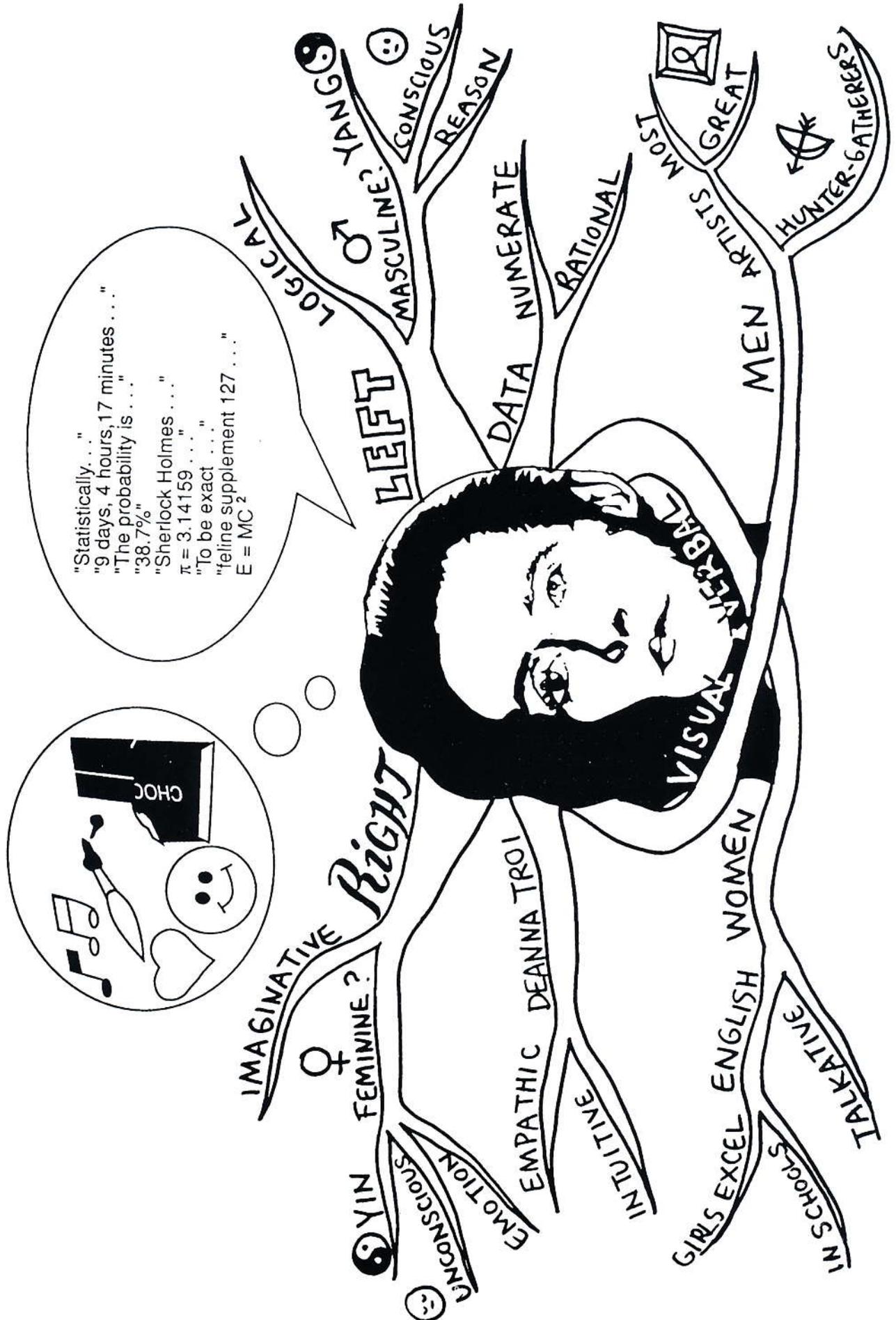
I thought about it. It made sense. As hunter/gatherers, primitive man had to develop acute visual-spatial skills in order to throw a spear with the right trajectory to hit a moving antelope. Meanwhile, back at the camp, women were raising the children and inventing agriculture, clothing and fire. They needed good communication skills.

On the other hand, at primary school, boys are usually better at maths and girls usually excel at reading and English. Both of those, we are told, are left-brain functions.

Probably the only conclusion we can come to is that the brain is far more complicated than our simple models and that we should therefore be wary of generalisations. The explanation for the artistic 'superiority' of men over women and for the loquaciousness of women may well be social rather than physiological.

What do readers of *Synapsia* think?





## THE FEMALE BRAIN – A PERSONAL VIEW

**Lady Mary Tovey**

'Eternal Woman draws us upward' – Goethe

Many years ago, my mother, talking about my first husband, said 'I am so glad you married someone who is more intelligent than you – just like I did!' Later, my first husband, knowing who my second husband would be, said 'You can't possibly marry such an intellectual!' My mother was totally convinced that she was inferior to my father and yet, when I look back at her achievements, it makes me very sad that she went through her whole life with this misconception. She brought up three children, a son (born 1938) and twin daughters (Julie and Mary) born seven years later, at the end of the war in 1945. My mother's skills were many: gardening, cooking, sewing, knitting; most important of all, she brought us up with great love and care. She was a volunteer worker for a local welfare organisation, helping young mothers with sage advice and food supplements. She handled all the finance to do with this. Her sewing was legendary. She made all the twins' clothes, including beautiful dresses, some of which were smocked – a complicated process of making mini pleats and then embroidering on top of the pleats in a very intricate pattern. She always had a pair of knitting needles in her hands as she and my father

watched television. I still have some of the cardigans and sweaters that she made – she died in 1983, aged 67.

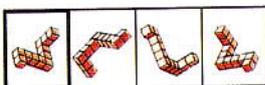
Of course, when you look at the intricacy of following sewing and knitting patterns, it has been shown, and I quote from an article by Doreen Kimura (Professor of Psychology and honorary lecturer in the department of clinical neurological sciences at the University of Western Ontario) in *Scientific American* 1992 'that women are better on precision manual tasks, that is, those involving fine-motor co-ordination.' The fact that men and women have slightly differently wired brains is, of course, of immense importance to the continuation of the race, but a large proportion of the female population has been given to understand, through the ages, that they are the inferior sex. But with our increasing knowledge of how brains work, we can actually see that men and women use different parts of their brain power to achieve the same ends, and that women are better at some tasks and men better at others, thus constituting a very efficient team for the rearing of offspring.

As we find out more about the different skills associated with female/male brains, I am sure that society as a whole will benefit much more by treating and using the inherent skills of both to the advantage of all. The differences are shown in the graphics below:

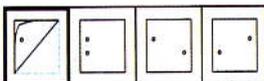
Throughout evolution there have been some very notable female achievers. In *Buzan's Book of Genius*, six women are noted in the top 100 geniuses – Elizabeth I, Martha Graham, Marie Curie, Maria Montessori, George Eliot (nom de plume of Mary Ann Evans) and Sappho. Today, there are many more women rising to the top in most professions – lawyers, scientists, pilots, etc., although I have to say that, in my experience, there are still too few women in senior managerial posts in companies. This is a serious lacuna in our social system: just imagine what a woman

### Problem-Solving Tasks Favoring Men

Men tend to perform better than women on certain spatial tasks. They do well on tests that involve mentally rotating an object or manipulating it in some fashion, such as imagining turning this three-dimensional object:



or determining where the holes punched in a folded piece of paper will fall when the paper is unfolded:



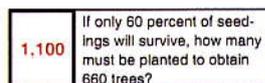
Men also are more accurate than women in target-directed motor skills, such as guiding or intercepting projectiles:



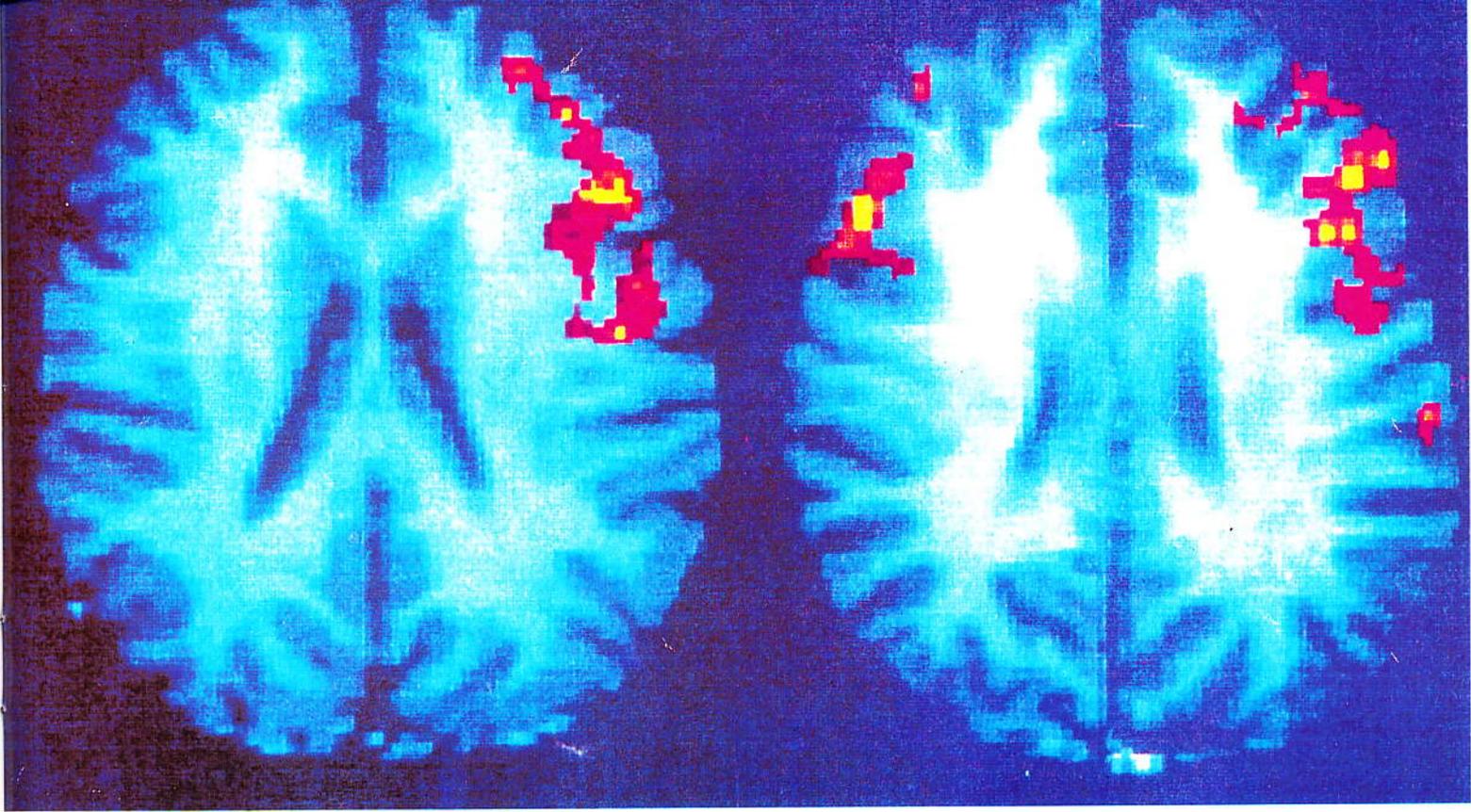
They do better on disembedding tests, in which they have to find a simple shape, such as the one on the left, once it is hidden within a more complex figure:



And men tend to do better than women on tests of mathematical reasoning:



Left: Problem-Solving tasks favouring men



of the calibre of Elizabeth I could do for one or other of our major corporations! In the words of the *Book of Genius*:

'The first Queen Elizabeth of England shines by the fact that she not only entered and survived the predominantly masculine political world of the 16th century, but also ultimately ruled and governed it. If Elizabeth's goal was to maintain power, and it was, then child-birth was probably the single most serious health hazard of the age. By this enormous self-restraint she succeeded in staying on the English throne from 1558 to 1603... She left England in a far better state than it had been for centuries beforehand: united, calm, at peace, prosperous and with the immense scientific and literary tradition bequeathed by Francis Bacon, William Shakespeare, Marlowe, Spenser and many others.'

### At last – The Real Differences between Men and Women!

The red and yellow patches show the blood rush in a male (left) and female brain after they were given problems to solve.

#### What makes a Successful Businesswoman?

Is it talent? Well, perhaps, although I've known many enormously successful people who were not gifted in any outstanding way, not blessed with particular talent. Is it, then, intelligence?... What, then, is the mystical ingredient? It's persistence. It's that certain little spirit that compels you to stick it out just when you're at your most tired. It's that quality that forces you to persevere, find the route around the stone wall. It's the immovable stubbornness that will not allow you to cave in when everyone says give up. – Estee Lauder

#### Problem-Solving Tasks Favoring Women

Women tend to perform better than men on tests of perceptual speed, in which subjects must rapidly identify matching items—for example, pairing the house on the far left with its twin:



In addition, women remember whether an object, or a series of objects, has been displaced:



On some tests of ideational fluency, for example, those in which subjects must list objects that are the same color, and on tests of verbal fluency, in which participants must list words

that begin with the same letter, women also outperform men:

L _ _ _	Limp, Livery, Love, Laser, Liquid, Low, Like, Lag, Live Lug, Light, Lift, Liver, Lime, Leg, Load, Lap, Lucid ...
---------	------------------------------------------------------------------------------------------------------------------

Women do better on precision manual tasks—that is, those involving fine-motor coordination—such as placing the pegs in holes on a board:



And women do better than men on mathematical calculation tests:

77	$14 \times 3 - 17 + 52$
43	$2(15 + 3) + 12 - \frac{15}{3}$

Right: Problem-Solving tasks favouring women

# KNIGHT MOVES

## ***A Profile of Mind Sports Artist Christopher Hedley-Dent***

Modern figurative painter Christopher Hedley-Dent was born in 1952 and currently resides in Devon. As an artist he is interested in a wide range of subject matter and considers himself to be a painter of ideas, grounded in observable reality. Since moving to the countryside, landscape has been forming an increasingly significant part of his work, and he has just concluded a landscape exhibition at the Plough Arts Centre, Torrington in Devon.

In addition to painting professionally, he has held the position as part-time Head of Art at Westminster Cathedral Choir School for the last eleven years. He is married with two small children, reads widely, likes walking, writing poetry, and is a keen amateur musician.

Here he writes about the ideas informing the Arthurian art exhibition and its connection to the Mind Sports Olympiad.

My motivation for painting the Arthurian pictures was, initially, the simple one of wanting to use a myth that deals with the relationship of the Ideal State, war and individual spiritual growth and that still has currency today, in so far as everybody knows the stories, at least in part.

The pictures, which are not intended as literal illustrations, are based firstly on the stories themselves, particularly those concerning the Holy Grail legend as related by Malory, De Troyes and Von Eschenbach. Second, they reflect my response to landscape sites that have Arthurian or Mediaeval associations, in particular, Cadbury Castle in Somerset which was at one point a contender for the site of Camelot.

As the work developed it became clear that the central image of the series was going to be the knight in various roles and situations. He is depicted fairly anonymously in most of the pictures, as I wanted him to be a representative Everyman. I think of him as a Perceval figure, in so far as he is a witness of and

participator in experiences that he does not fully understand.

The two pictures illustrated here show different aspects of the knight's quest. 'Thrice Knightly' takes as its theme, erotic encounter. Its setting is an imaginary 'castle perilous', the place of temptation. 'Chase' is about chivalric conflict and the moments prior to a joust, mystery and illusion.

The pictures use a deliberately episodic and fragmented language, as a way of enacting the themes of physical and spiritual disintegration. The resulting spatial games played out in the paintings and on the spectator (the conflict between surface pattern and three dimensions) are intended to suggest different levels of reality and experience. For example, the flat, decorative and heraldic patterns of lances and horse covers, etc., contrast with the three-dimensional brutality of physical conflict.

In thinking about the connections between my pictures and the Mind Sports Olympiad, I find it fascinating that many games employ flat, patterned boards and three-dimensional pieces, chess, of course, being a prominent example. Chess is also the art of spatial visualisation and imagining, taken to the very highest degree. It is also interesting to reflect that the game gained currency in Europe, at the same time as the efflorescence of Arthurian and Holy Grail legends and that it provides a microcosmic analogue to chivalric warfare.

I am very excited by the prospect of samples from my Arthurian series being exhibited at the Mind Sports Olympiad. In showing these pictures to a new audience, I hope they will provoke a free and imaginative response in this context.

Illustration facing page:

*Top: Thrice Knightly*

*Bottom: Chase*



## ANIMAL INTELLIGENCE

**Cortical Canine by Mowgli**

Do you own, or have you ever owned, a dog? If your answer is yes, do you believe that your dog knew in advance when you were or are about to return home?

In a survey by Dr Rupert Sheldrake, author of *Seven Experiments that changed the World* nearly 50% of 122 dog-owners in Manchester answered affirmatively.

Believing that there are far more subtle ways of communicating than those of which we are currently aware, Dr Sheldrake, pursued this idea. Following the Manchester results he completed studies of a terrier which initially showed that the dog has an inexplicable knowledge of the time of his absent mistress's return. The dog, Jaytee, aged seven, and belonging to Pam Smart, Sheldrake's research assistant, is probably of Border or Lakeland descent. Jaytee appears to have at least a sixth if not a seventh sense!

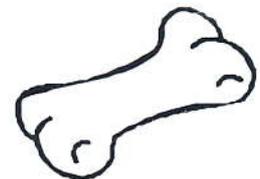
Dr Sheldrake has filmed 153 experiments on Jaytee. Miss Smart has been told to leave her house in Ramsbottom, Lancs., and travel varying distances before being given a signal to return at random

times. The randomness was thrown into the experiment to make sure that Jaytee was not responding to already memorised patterns of Miss Smart's behaviour (a compliment, anyway, to the animal's assumed powers of memory).

Sheldrake reports that 80% of the time, the dog reacted in such a way as to suggest that he knew when his mistress was returning.

Miss Smart (an appropriate name for Jaytee also!) reports that the 'cortical canine' appears able to predict her return even when she uses unusual and unfamiliar methods of transport, including a bicycle or taxi instead of her car.

Do any *Animal Intelligence* readers have similar series to report?



# INTELLIGENCE ABOUT INTELLIGENCE

**More news from the world of the brain**

## Home and Away

With the Mind Sports Olympiad now upon us, the following story is of special interest. It marks a major revolution in the development of intelligence,

The story concerns Rebecca Sealton, a Brooklyn girl who has won the 1997 United States National Spelling Bee. Rebecca was, significantly, the first home-schooled winner of the competition. The trends indicate that she will probably not be the last.

A new study has found that the number of students nationwide in America being schooled at home has rocketed, from approximately 400,000 in 1990 to more than 1.2 million today, and that these students tend to excel academically.

Brian Ray, an Oregon researcher who was the author of the study, found home-schooling to be the fastest growing 'educational alternative' in the country. The movement has rapidly been gaining wider acceptance; and while it is not yet in the mainstream, it is no longer seen as an offbeat refuge for the deeply religious, the loners, or families who consider public schools inadequate.

There is growing awareness that children who acquire their learning at home are not, as was previously thought, disadvantaged. On the contrary, they appear to have multiple advantages: home-school children out-perform their public school counterparts on standardised tests, on average scoring between the 80th and 90th percentiles regardless of whether their parents have high school or college diplomas. One mother, Kathleen Smith of Athol, Massachusetts, has taught her two sons at home for five years, and believes that public reaction has changed dramatically in that time: 'People are more accepting – they aren't as shocked by it now,' she told the *Boston Globe*.

*Intelligence About Intelligence* would love to hear *Synapsia* readers' thoughts on this issue. Do any of our readers have personal experience?

## A Tiger in the Think-Tank

The year's greatest sporting phenomenon is Tiger Woods, the young American golfer who, in his first year on a professional tour, has shot to number one in the rankings, won the US Masters and astounded everyone with his 'space-age' golf. As well as being top of the ranking list, he is the largest money earner this year, and leads the tour in a number of other categories including the length of his drive.

With sponsorship contracts already totalling over US \$40 million, Tiger is a supreme example of the motto 'Think and Grow Rich'.

When asked about the secrets of his success, his focus was totally on his brain: 'The biggest thing is to have the mind-set and the belief you can win every tournament.' The top-selling American newspaper *USA Today* even entitled a feature on the young phenomenon 'WOODS USES HIS HEAD TO WIN FOURTH TITLE OF YEAR!'

Commenting on his recent victory at the Western Open, Woods again focused on his brain: 'It's nice to get around and get in the club house and win a tournament with your mind because that is what wins majors. It's nice to be able to rely on your mind.'

## What makes Martina special?

Martina Hingis became, this July, the youngest Wimbledon Women's Singles Champion this century.

But what is her secret?

Nick Pitt, the renowned sports journalist, has described her achievements in the following way: 'Of all the requirements of a champion – skill, courage, perseverance – the knack of winning is her great strength. ...She was thinking all the time, working out a way, first to stem the tide, then to win. Her youth is remarkable, her strokes are amazing, her smile is sweet but it is her *brain* that makes her really special.'



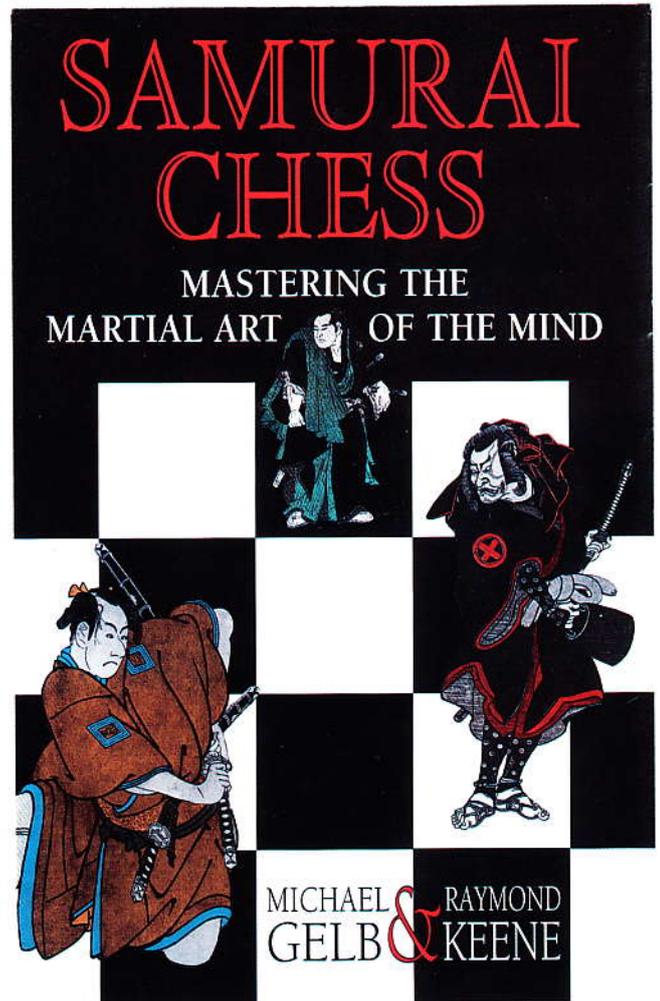
## BOOK REVIEWS

### Chess and Martial Arts

#### Chess and the Sword

Michael Gelb is internationally recognised as a pioneer in the fields of creative thinking, mind-body coordination and leadership development. A student of martial arts since 1968, Gelb has studied karate, kung fu, tai chi chuan, boxing and wrestling. An avid student of Mind Sports, Gelb is approaching shodan (black belt) level in go, and prides himself on once achieving a draw in a game of chess with Raymond Keene.

Raymond Keene, OBE (who is no stranger to *Synapsia* readers!) is the world's leading expert on chess and Mind Sports. An International Grandmaster since 1976 and winner of 14 separate British Championship titles, he is the author of over 100 books. He



is chess correspondent of the *London Times*, *Sunday Times* and *Spectator*, and is *The Guinness Book of Records* Official International Arbiter for Chess. Raymond Keene is also an enthusiastic student of martial arts, who has recently been awarded his sixth kyu certificate in aikido.

If, like me, you want to learn to play chess but cannot find a spare moment and want to find out more about the martial arts but just cannot find a book which clearly defines and describes them, then you will find *Samurai Chess* an excellent

introduction to these fascinating worlds of human knowledge.

*Samurai Chess* is beautifully written. It sets out to improve your knowledge about martial arts – although it is up to you whether you decide actually to train for physical combat. Additionally, you will be significantly better at chess, ‘and you will learn an approach to winning based on martial arts’ principles that will significantly improve your strength. And whether you are a novice or an experienced player, you will come to enjoy a unique metaphor for success in business and life.

The book is liberally furnished with quotations, pictures and many examples of chess games. If you are a novice learning to play chess, you will particularly appreciate the chessboard illustrations. But, whether or not you have hitherto been an aficionado of martial arts or chess or both, I can warmly recommend this really excellent book.

*Review by Lady Mary Tovey*

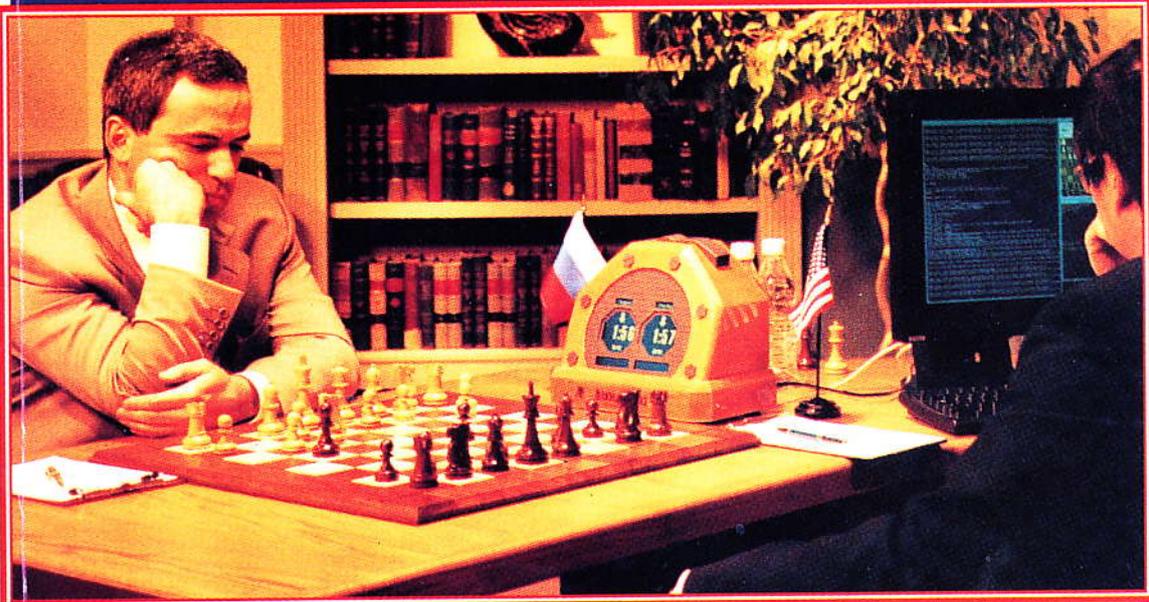


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*Solution to crossword from Spring issue.*

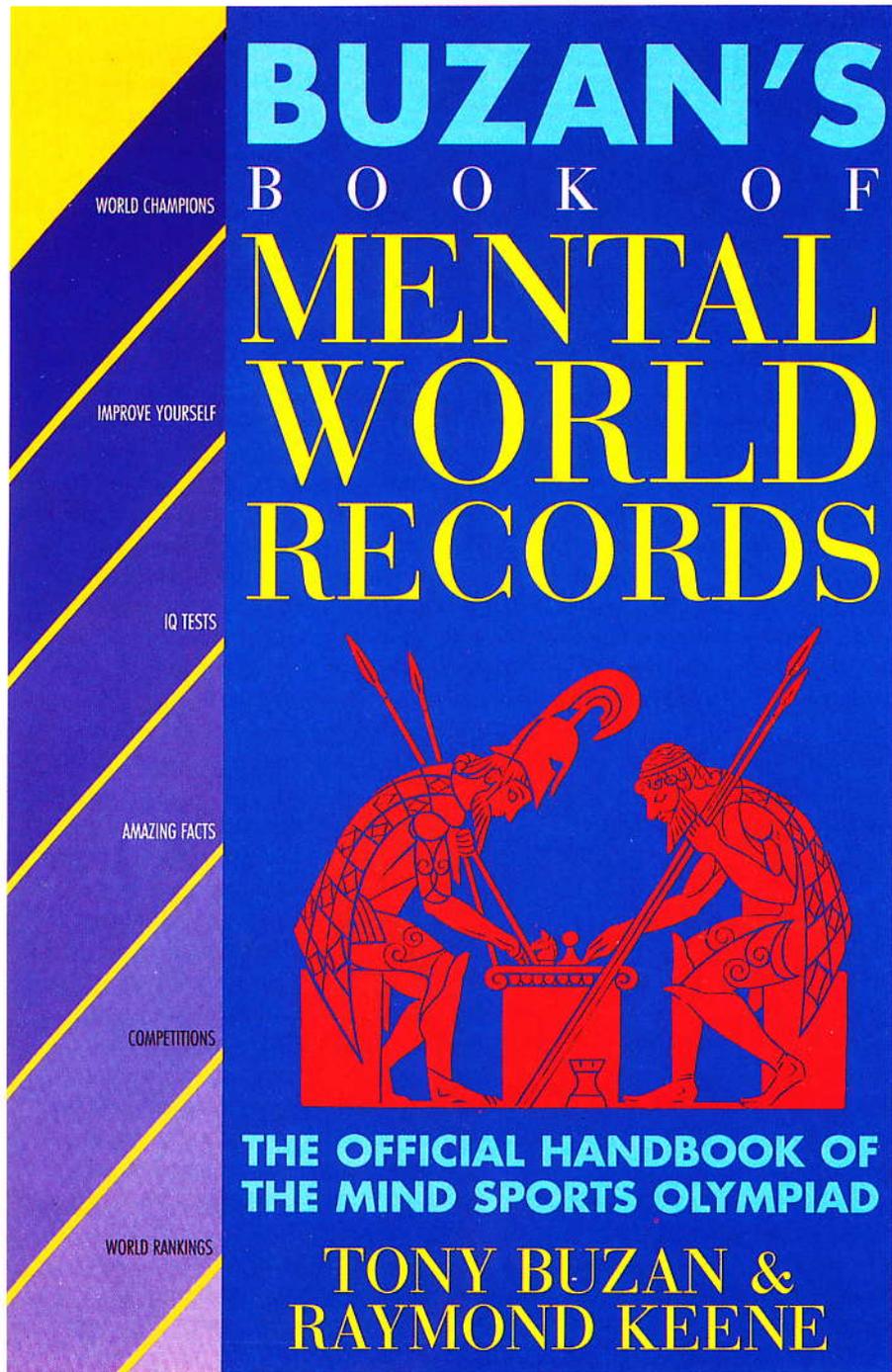
# MAN VERSUS MACHINE

## Kasparov VERSUS Deep Blue



**RAYMOND KEENE AND TONY BUZAN WITH DAVID GOODMAN**

*Man versus Machine* by Raymond Keene and Tony Buzan with David Goodman is available for £9.99 from Buzan Centres, 54 Parkstone Road, Poole, Dorset BH15 2PX (tel: 01202 674676; fax: 01202 674776). ISBN 1-874374-07-4.



## Did You Know That...?



- Tathagat Avtar Tuli 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 sporting 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.
- 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.
- Sean Adam, who holds the Speed Reading world record, can read at the rate of 3,850 words per minute.
- The US President and Congress declared the 1990's 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.

Find out about all these, and more, in *Buzan's Book of Mental World Records*  
(the official handbook of the Mind Sports Olympiad)

by Tony Buzan and Raymond Keene

(Buzan Centres, £4.99, ISBN 1 874374 06 6).

# BUSINESS BRAIN

People often comment that I have a full life and ask how I am able to manage all the parts. It is rather the same as when you watch someone juggling – it looks fairly complicated, but if you try it yourself, you *know* that it is even *more* complicated! So how do I manage? I have three important aspects, one, a special tool that I find indispensable in keeping me feeling on top of all the 'stuff' of life: a Mind Map. Another is the UPO (Universal Personal Organiser) a life-management system created by Tony Buzan. Third, is a sense of purpose, knowledge of the vision and reason for my life.

In this article I will tell you how I manage all the parts of my busy life in the happy anticipation that some of the ideas will be a help to you.

## **A Day in the Life of ... me!**

My life is divided into three main geographic sections: UK – where I have a flat and an office; USA – where I also have a flat and an office; and the rest of the world – where my suitcase and I make regular visits.

I also have three main attention areas: myself – keeping my life in line with my vision; my family and friends – time and attention for those closest to me; my 'work' – the actions I do on a daily basis.

Wherever and whatever I am doing, the part that holds the most influence for me is the role of vision to assist with the prioritisation of the content.

### *What does that mean?*

Let us start with the role of the vision.

It helps to know the answer to the questions, Why am I here? What is my purpose? This creates a *context* or reason for all the rest of the things or *content* of your life that fills every day, month, year, decade, decades and whole life. (I will be contributing an article in a future edition of *Synapsia* on this topic, as it has come to my attention that many people would like some processes to assist with the clarification, revamping or even finding of their

visions. This has been an interest of mine for many years.)

So, 'the role of the vision to assist with the prioritisation of the content' means that there will always be a lot of 'content' and that can easily take up all of every day, even a whole life. When you have a vision, a purpose, a direction, then, just as the twist of the kaleidoscope gives a whole new picture with the same elements, so your perception and therefore your ability to prioritise what is *most* important is improved. In the following explanation of my prioritisation techniques, this will become even more apparent.

To begin the process:

## **From Night to Morning!**

During the night all sorts of thoughts pop into your head: things that you need to do; things that you want to remember; additional things that it would be nice to do; where you placed something you thought you had lost; a brilliant idea for business; a part of a poem; a friend you want to contact; and numerous other things. By the time you wake up you feel as though you have done a day's work!

If possible, as I sip my morning tea, I begin my 'Brain Purge Mind Map'. This is where I just put down *all* those things that have been popping into my head while I can still easily remember them. I do this in my UPO (Universal Personal Organiser), on the day page. This life-management system, devised by Tony Buzan and a panel of experts, is based on all that is known about how the brain functions and what that means: the potential ideal life-management system and the da Vinci principles of scientific with artistic and artistic with scientific, as well as using and pleasing all the senses. More about the UPO as we proceed with my day.

Then, on top of this as you shower, have breakfast, travel to work, read the paper, etc., more things pop into your head. So by the time you get to your desk your head is feeling full again!

**Business Brain guru  
Vanda North juggles  
the tricky business of  
life.**

As soon as I can, I continue with my Brain Purge Mind Map. This means that all those miscellaneous thoughts, belonging to *all* categories of my life, get put down on a fast 'Brain Bloom Mind Map' (see the example below). I always try to put them under some Basic Ordering Ideas (BOIs) to start to create some order. My Mind Map always includes a 'miscellaneous' or 'also' BOI, for those things that do not easily fit in elsewhere.

Next, I look at my schedule for the day and get an overview of the 'feel of the day': How much flexible time do I have? Will I be more 'with people' or 'with papers'? Do the jobs require short or long time periods? Do I feel more or less comfortable with the tasks?

Then I look back to my Brain Purge Mind Map and use a highlighter to code the branches: a colour for myself; a colour for family and friends (green); a colour for work (blue); a colour for anything that is a *priority* – whatever the category (pink); and a colour for the items that bring my vision closer (yellow).

Next I go round and look for the three D's: Do; Ditch and Delegate. Is there anything that I can *ditch*? (Not really necessary to do at all.) Is there anything that I can *delegate*? (Give it away to someone else.) Finally, what do I have to *do*? (Often too much still seems to remain in this category.)

The remaining *do* items need to be organised in three ways: items that are a part of making your vision become a reality get a *priority one* rating (yellow); items that fit into the flow of the day and/or other actions that would cause the least disruption get a *priority two* rating; and items that match the curve of your energy, whether high or low in relation to how much energy is required by the things you have to do get a *priority three* rating.

The next step is to slot these activities into your day in order of priority and bearing in mind energy considerations and the flow of activities (make sure that at least *one* action is a step towards your vision) *and do them...*

At this point in your day, many unplanned things come into play, all of which seem to want to upset your good intentions from becoming a reality!

**Ball Interference**

When you are trying to juggle balls, lots of things may interfere! The light may be too bright or in your eyes; the background

may be too jumbled and distract your attention; other people and other objects may get in your way; and you may doubt your ability and in some way fear failure.

Many of the same things may happen when you try to take control of your life. Let's look at ways to handle some of this interference.

**People**

It would be so easy to get everything done, if only it weren't for other people! Well, at least that is how it sometimes feels. I have found the following techniques useful in this regard:

Plan for interruptions. In that way they are not so upsetting and if you don't get them you may find that you have an unexpected oasis of time – most pleasing!

Question the real urgency of the matter they raise. I have often found that it may not be as important as it may have initially appeared. Agree a reasonable date with the person.

Try saying 'no'! I have discovered that I used to want to feel indispensable and so felt as though I had to say 'yes' to everyone. Pick your priorities carefully and let some of the other matters go to others.

Ask for help; tell people the underlying thrust of your vision and solicit their suggestions and help. Get a team together. Many people's vision/purpose is to assist someone else to attain a vision they deem worthy, but not necessarily to do it themselves. Keep a sense of play and enjoyment in all that you do.

**Time**

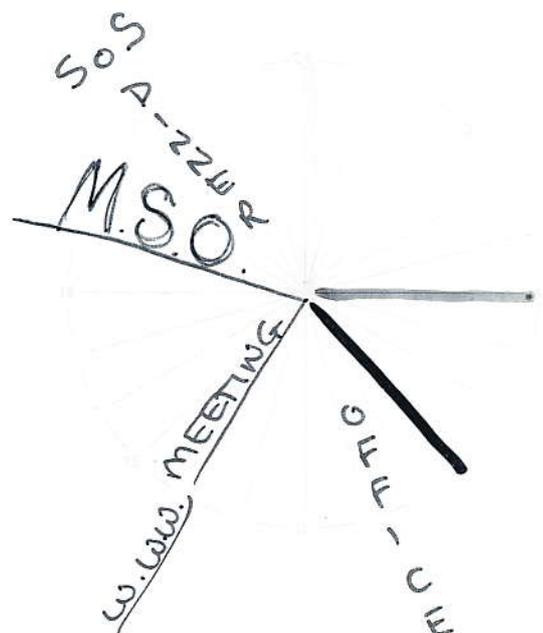
As with juggling, timing is crucial! Also, as with juggling, it can look complicated until you know the pattern and the flow, after which it feels easy and effortless. I love the feeling when a day goes really smoothly. If I analyse what I do on those days I notice a few key elements:

I will have clearly set my priorities out and know what I want to achieve.

I will have set a block of time to achieve a goal (remembering to take appropriate breaks) and then tuck in without thinking of anything else. I will use a timer to measure the blocks of time.

**Many people's vision/purpose is to assist someone else to attain a vision they deem worthy, but not necessarily to do it themselves.**

A day in the life.



Time often seems to expand when I work this way and I feel real satisfaction at the end of a day.

Clump activities together: do all the phone calls; write all the letters; and deal with the miscellaneous jobs in one go.

If possible work at a time that is best for you. For example, I love to write in the very early hours (3:00 am). I can get more done in a few hours at that time, than many hours later in the day. I then fall back to bed for a few hours of the best sleep and have the lovely sense of discovery when I wake up!

Take regular breaks to keep your energy high and allow you to be more effective in your work or study. I have a 'Break Buffet' which means that I keep back little tasks and do them as a break – sometimes. If I am working from home these tasks might be to water my plants; fix something; tidy somewhere; sew on a button, etc. If I am in the office I'll make tea; tidy a drawer; speak to someone; clean out a file, etc. This way I am taking a break and also getting something useful done – it works very well. Sometimes, I delight in listening to a piece of music or doing stretching exercises. The important thing is that there is a good choice and you do what you feel like.

### **Feelings – including Fear**

When people are given three balls and asked to try juggling them, many stand there and do nothing! When asked why, they give many reasons: some say that they feel embarrassed, some say that they are no good at ball games; some feel that they would look silly; some are afraid of dropping the balls; some do not like to risk; and others know they can't, so why try?... a whole range of feelings with fear of failure as the main one.

Again there is a direct relation with planning your life. It is easier to let the flow of content, the every day stuff, fill your day, week, month, year, decade and life. To stand and hold the balls is safe, but you don't learn to juggle that way! It is necessary to make a commitment and to risk a throw before you can start learning and positive action can take place. You have to become responsible to make what you want, become as reality, and this requires having all those feelings *and still* acting anyway!

I often feel the fear growing inside of me and have to take myself by the hand and say 'Come on Vanda, you can do it. Take the first little step.' The feeling of

inner satisfaction when you know you have faced and overcome a fear is most gratifying and gives you the strength to try again the next time.

### **Environment**

When you are about to juggle you will probably have already created the right environment, with breakables out of the way; a space where it is easy to recover the balls; a ceiling high enough to throw the balls; and cool enough to encourage all the bending and stretching you are about to do!

It is just the same with life management! Arrange your work space in a way that is most conducive to as happy a brain work place as possible. Wherever I am there are a few things that make all the difference in helping me to create a positive work environment: some space, clear of anything else; clean sheets of paper and my coloured pens displayed invitingly; something of nature to see, either looking out of a window, a flower in a vase, a shell or stone, or even a poster of a scene in nature; fresh air supply and as much as possible natural light; and the possibility of some music in the background as I use music as a spice, the right sort at the right time, according to my mood and the work to be done.

### **Dropped Balls: Missed or Forgotten**

Even with the best organisation in the world, balls will still be dropped sometimes. As with juggling there are two things to do: notice where the ball fell and what happened to make it occur; and pick it up and have another go.

The systems that I have set up and the UPO act as a great safeguard against forgetting things. But when I do forget I quickly look at why it occurred. What was taking my attention? What can I do to make sure that I do not let the same thing happen again? And how can I best rectify the situation I have caused by forgetting? Carry out these steps and move on to the next throw, don't dwell on the situation.

### **Crashed Balls: Conflict**

When one ball hits another, they both go off in different directions. Although this makes for a spectacular show, it probably isn't quite what you would have wanted! There are two aspects here: can you avoid the conflict with prior planning; and can you create something new from the outcome if it has already happened?

As much as possible I try to think ahead by daydreaming through upcoming activity and observing any potentially difficult areas. Then I see if there is anything that I can do to create a route that may avoid unnecessary conflict.

If this is not possible then I look carefully at the situation and plan my actions so as not to repeat the scenario. I then move on to a positive, enjoyable activity.

**Decisions: A or B?**

Shall I throw this one or that one? Sometimes one can be in a dither over a decision and make a third choice of deciding not to decide at all! This can waste a lot of time.

Decisions become easier with a vision/purpose because usually one road will bring you closer to your goals than the other and this might make the choice easier. If both seem to be as good as each other, then it is a matter of which feels best. If I am unsure on a very complex issue, I will Mind Map out the options and the outcomes and then leave it, preferably overnight, in order to revisit it in a fresh frame of mind the next day to see what has become apparent during the incubation period. Having made my decision, I then plan the steps of action into my UPO so that it fits into my life.

**Flying through the Air**

When you finally do get all the balls to do what you want, the feeling is quite euphoric! A great feeling of success, yes, for only a relatively small thing, but it is all those feelings of little successes that give you the energy and motivation to keep on going towards the big successes. If you wait for the big one to celebrate, you will miss out on a lot of enjoyment in your life. Part of the great secret to happiness and fulfilment in life, is to enjoy the journey as much as the destination.

**Second Stage**

In the UPO there are four main life areas (in order of priority): yourself; your family and friends; creativity; and wealth. You must take care of yourself or else you cannot do much else! It was by monitoring my

weight, sleep, mood, exercise and efficiency for four years that I realised that only one factor made a significant difference to my effectiveness – and that was exercise! I now exercise on a regular basis – I make sure that I make time for it as I know I will do and be better for it.

I colour these four sections of my life and can see by glancing at my monthly plan whether I am in or out of balance; and then do what is necessary to restore the area that is lacking.

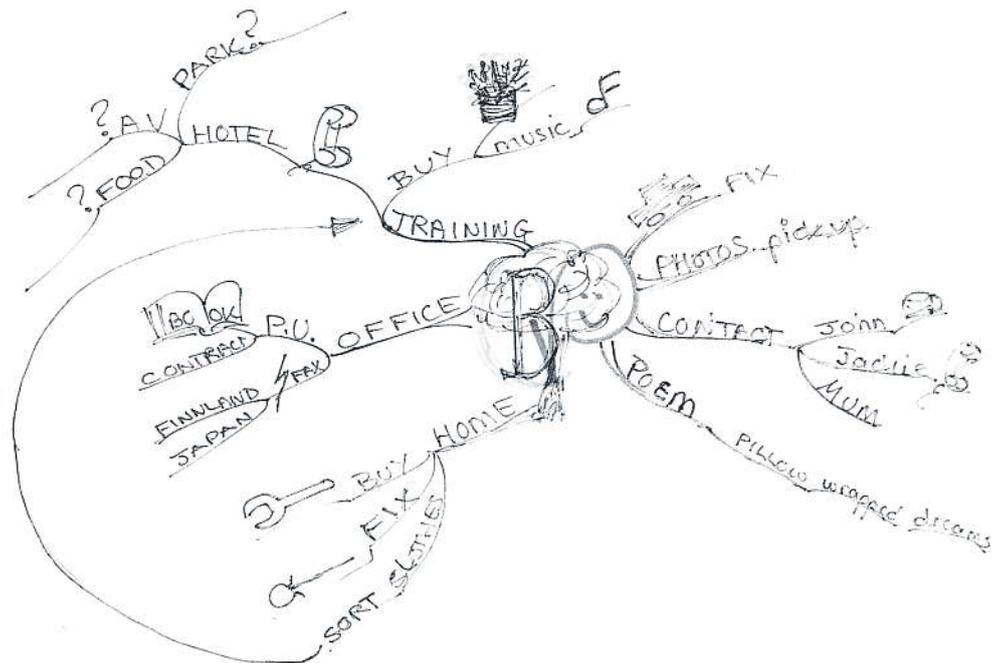
Twice a year (I am fortunate that my birthday is in June, so that is my check date) I review/update/redo my goals and affirmations for the year and see how I am progressing. Again I then look at what I need to add or subtract from my schedule to meet those goals.

**Conclusion**

Life management is very personal and you must adapt it to suit your vision and way of doing things. In this article I have shared my way as that is a way that works well for me. I hope that it will stimulate your own thinking on the aspects that will suit you, identify the ones to amend to your taste and help you to find the find the opposite to the ones that make you go 'Oh, no!'

The key point is that, assisted by the UPO, I manage my *life* not my *time*! Time and space are natural laws that are there to work with us, *not* to command us!

Please let *Synapsia* know of any other ways that you have found to manage your life well and we shall either put them in the letters section or do a follow-up article. Be the Master Juggler of your life; show us who you are and what you can do!





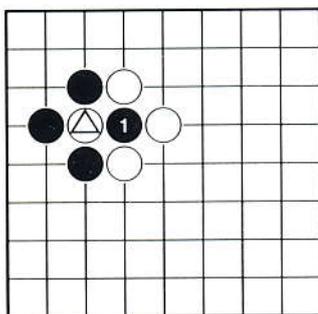
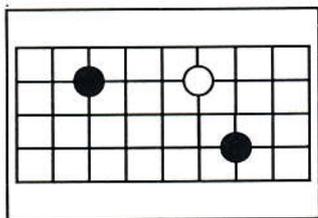


diagram 1

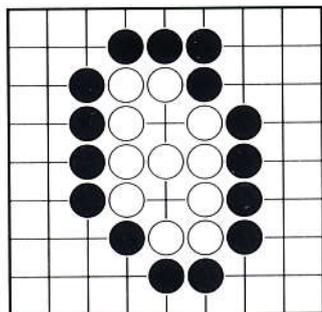


diagram 2

## MIND SPORTS: GO

**John Fairbairn**

In the last column I described a new way of learning go called the Capturing Game. In Stage 1 you learnt that stones are played on the intersections of the board, and if they have vacant adjacent points (called liberties) *along the lines* they are safe. But if a stone has no liberties it is captured and removed at once. In Stage 1 the first player to capture a stone is the winner.

Stage 2 is the same game except that the winner is the first to capture three enemy stones – three at once or one or two at a time. Assuming you have gone this far, you will be a hair's breadth away from playing real go, and you will find two things appear naturally (and because it is natural, it is better to try it than read about it).

One is what we call ko, from a Japanese word. It refers to a kind of ever-repeating position. An example is below.

You will recall that Black 1 is allowed, even though at the moment it is played it has no liberties, because it captures White's triangled stone. The triangled stone is removed, but then White could apparently play a fresh stone there and capture Black 1 by a similar process. Then Black could repeat his move 1, and so on. This repeating position is the ko. All kos look like this, involving one captured stone at a time. In the Capturing Game, kos hardly matter – in Stage 1 the first to capture any stone wins, and in Stage 2 the first to capture three wins. In real go there is no limit (within the confines of the board) on how many stones you can capture, so if a ko occurred you could be in for a very long night. One meaning of ko is an aeon.

### Diagram 1

Real go gets round this problem by an artificial rule. You are not allowed to recapture in a ko unless you first play a move elsewhere. This creates one of the most fascinating features of go, because what happens in practice is that you try to play a move elsewhere on the board strong enough to force the opponent to respond. That is called a ko threat. If the opponent answers it, you can go back and

capture the ko. If he ignores it, and resolves the ko (e.g. in Diagram 1 if Black plays at the triangled point), you have had a free move elsewhere and it is now your move to follow it up. In this way several battle fronts can be created at once.

You can probably sense that go is a highly strategic game even on a 9x9 board. The real board is 19x19 and at that size many kos tend to occur in each game. Whole books are written on ko fights.

Now the other thing you will find is even more fascinating. As you try to stop your opponent capturing your stones, you will accidentally or deliberately form positions like diagram 2.

### Diagram 2

There are two vacant points inside the totally surrounded white group. Black would like to capture it (that is, take away all its liberties), but if he tries he has to start by placing a stone on one of the empty points. It will then have no liberties itself, and as it is not yet capturing the white group it is itself captured. The suicide is pointless.

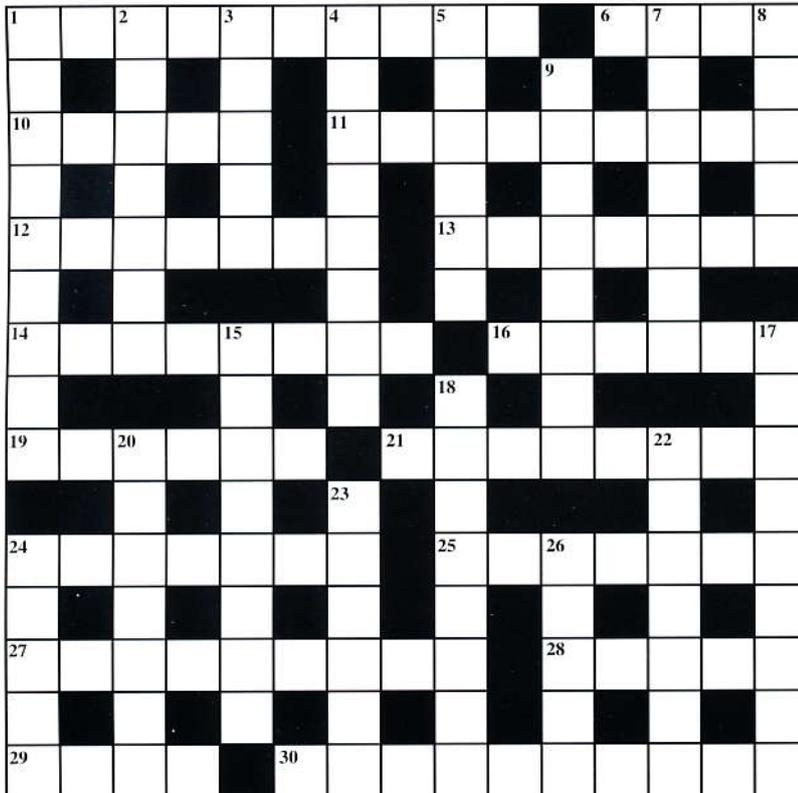
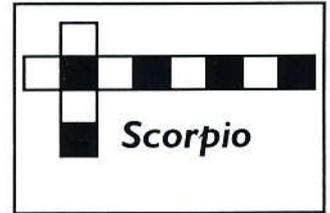
Black can find no legal way to play on the two vacant points, so White is permanently safe. We say he has two eyes and that he is alive. White could have had more points inside his group, or more eyes, and he could still be alive if the situation is eventually reducible to one like the above. Study well the corollary – a one-eyed group is dead (try putting a black stone in place of the central white stone).

It is my belief that the way go started was something like this: generals met in a temple before battle to divine the result by scattering stones on a board (probably in imitation of the cracks in scapulomancy). There is a reference to something similar in Sun Zi's *Art of War*. This evolved into using stones of two colours for the two sides. Then (in my reconstruction) they began moving the stones around and, *Homo sapiens* really being *Homo ludens*, they developed ways of capturing. They played the capturing game.

**John Fairburn, London-based journalist and translator, continues his series on the fascinating game of go.**

# MIND SPORTS: CROSSWORD

*Accusation, by Richard Browne*



**ACROSS**

- 1 Charge account is a disaster (10)
- 6 Stone work, a cathedral's last (4)
- 10 Stick securing old boat (5)
- 11 Farm-workers left out of joke (9)
- 12 Engineers have measures of wood for logs (7)
- 13 Not prepared to describe old king of England (7)
- 14 Symbolic picture for 'turn right in street' (8)
- 16 One was mad once to enter this sanctuary (6)
- 19 Restricted new weapon (6)
- 21 Hairstyle found in backward part of Shetland? (8)
- 24 Warship of fighting weight (7)
- 25 Reject girl's heart, say (7)
- 27 Six toed backward primate may be shown on TV (9)
- 28 Rare white charger (5)
- 29 In a trance - knocked to be heard (4)
- 30 Conclusion of dispute in small village (10)

**DOWN**

- 1 Find out for sure (9)
- 2 Mocking, give old philosopher a little money (7)
- 3 In prophet, note derisive tone (5)
- 4 12 attempt to make embroidery (8)
- 5 Some pop a question that's obscure (6)
- 7 Trap in mine accident (7)
- 8 Somewhere to park for store (3-2)
- 9 It's scary, working in valuable room (8)
- 15 Property in what condition? Splendid (4,4)
- 17 Tactless order to admiral (9)
- 18 Loss of nerve, no longer having warm support? (4,4)
- 20 Sandwiches more expensive (news summary) (5-2)
- 22 A weakness, hoarding a source of riches? (7)
- 23 Fold with special care - extremely sensitive (6)
- 24 Bloke has right to shelter (5)
- 26 Swell material, we're told (5)

**Richard Browne is crossword contributor to *The Times* and the *Daily Telegraph*.**

*Solution next issue.*

*Solution to last issue's crossword is on page 37.*