SYNAPSIA

THE INTERNATIONAL BRAIN CLUB JOURNAL

VOLUME 2 NUMBER 1
WINTER/SPRING 91

The Brain Club Brain of the Year

B.F. Skinner Interview

The Brain Club – now a CHARITY

Business Brain

Floating University Report

Not just anyone can join

Everyone can

THE BRAIN CLUB

is for anyone who has a brain and wants
to learn to use it well.

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21st February 1995
Check in the bottom of your teacup!

EDITORIAL

The Brain Club has been given charitable status! In our centre spread **Synapsia** outlines the goals and objectives of the charity, and features our new and quite extraordinarily significant and symbolic charity number.

Our feature with the late Professor B.F. Skinner continues with the second of his three interviews in which the father of Behaviourism discusses the potential of the brain, himself as a young man, his thoughts on an ideal education system, core curriculums for children, his theories of teaching, the importance of learning how to learn, the brain, love, Leonardo da Vinci and the creative mind.

Synapsia also wishes to salute Garry Kasparov, the Brain Club's Brain of the Year 1990 and encourages readers to submit their own candidates for the Brain of the Year 1991, the Brain of the Decade, the Brain of the Century and the Brain of the Millennium.

With this issue we also start the first of a two-part feature on the first Brain Club Floating University, and encourage all Brain Club members to attend our 1991 Floating University from 21-27 September in Bodrum on the Aegean Sea.

And do **you** know who Zeus' (Jupiter's) greatest love was? And who their progeny were? And do you also know what the main sexual attractant in the leading romantic novels is? For the answers to these more-than intriguing questions, check **Amazing Memory Stories** and **Intelligence About Intelligence.**

In our burgeoning Winter/Spring issue we are also pleased to have an in-depth coverage of the results and most brilliant highlights of the just-completed World Chess Championship, in which our Brain of the Year 1990, Garry Kasparov, successfully defended his championship in a match hailed as one of history's great titanic struggles between the Planet's leading strategic minds.

Continuing the search for mental excellence, **Synapsia** updates our readers on the latest progress on the Mind Sports Olympiad and the World Memory Championships.

In this issue we also introduce a major new feature: **Business** Brain. In our first feature article, Ron Philpott of Fluor Daniel reports on a major mental revolution in one of the world's leading multi-national engineering consultancy firms.

We also welcome to the pages of **Synapsia** a new regular feature: **Crawford's Corner**, by Professor Michael Crawford, author of **The Driving Force: A New Theory of Evolution**.

Synapsia also welcomes to our pages Susy Churchill, The Brain Club's new Chief Administrator and advisory psychologist, who, in conjunction with Vanda North, The Brain Club's Co-Chairman, surveys opportunities and activities for all Brain Club members in this **Decade of the Brain**.

We conclude this Editorial with a reaffirmation of The Brain Club's support for the Resolution of the United States Congress and House of Representatives confirmed on July 25th 1989, and encourage all Brain Club members around the world to work toward the goal of having **every** government accept the same global Resolution:

> **"Resolved by the Senate and House of Representatives of the United States of America in Congress Assembled, that the decade beginning January 1, 1990 hereby is designated the 'Decade of the Brain', and the President of the United States is authorized and requested to issue a proclamation calling upon all public officials and the people of the United States to observe such decade with appropriate programs and activities."**
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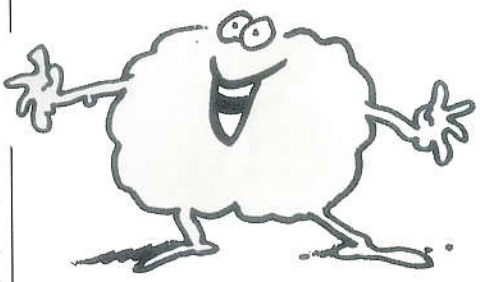
> **Approved July 25, 1989**



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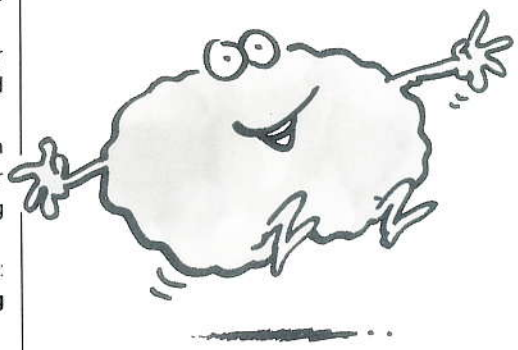

All contributions for the Spring edition should reach the editor, at the above address, by May 30. The editor reserves the right to shorten, amend or change any contribution accepted for publication. If you would like articles returned, please include an addressed envelope with appropriate postage.

Pécub, the world's fastest brain cartoonist, is happy to provide cartoons based on your ideas and requests.

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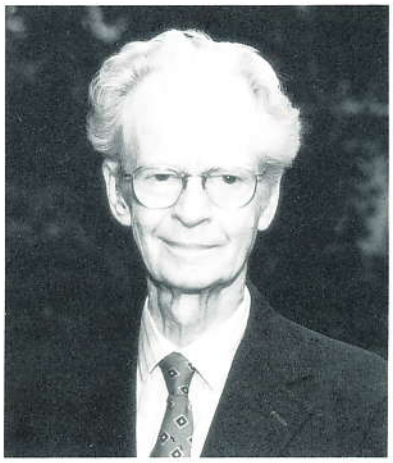
Two weeks before his death, B.F. Skinner, the father of Behaviourism and one of the world's leading investigators of behaviour, gave to the readers of **Synapsia** and the members of The Brain Club one of his last interviews.
In the second of his three wide ranging, energetic and provocative articles, Professor Skinner talks about the brain's potential, ideal education systems for the world, the upbringing of children, advice for the young, why he became a behavioural psychologist, love, and the creative mind. ◀

What about the potential of each individual to perform different acts of behaviour? How great do you think the behaviour pattern potential is? I don't know. Of course we have the unusual things like the people who do amazing things. I don't think anyone can trace that back but I don't think its a creative activity which is not physical. I have heard of a fellow who can sit at a piano, hear a concerto and play the whole thing through immediately afterwards. That is extraordinary. I can do it with two notes! How it is done with a concerto is beyond me. These are the kind of things that we will get around to eventually.

If you were now in the position you were when you were twenty-two or three, when you first heard or read Bertrand Russell, where do you think your interests would lie; what would you study? What would I go into, what kind of thing would I be doing? I don't know what my background would have been. If it has been exactly as it was, I would be a cripple because I wouldn't be in touch with the world as it is today at all. Things have happened in the world and I can't imagine any 23 year old evolving these days as I evolved then. I had the benefit of a small town Protestant upbringing, I had a good education in a very small school (there were seven in my graduating class) but we got attention from our teachers and I had four years of Mathematics, I had four years of Latin. It wasn't a bad education at all.

It sounds like a good one! Today it wouldn't be called relevant of course.

If you were suddenly given total control of the education systems of the world, and they said: "Dr. Skinner, anything you want the children to learn from the ages of 0-18 they will learn, what kind of education system would you construct? I would love to have that possibility. We know now how to teach about twice as much in the same time. The teacher in a class of more than 15 or 20 students is faced with a daunting task. The tutor had it easy. He could do two things and it was achieved. He could wait until his pupils did something and then could immediately say "Right" immediately. The teacher can't do that with 20 students – it's impossible. The importance of immediate feedback is extraordinary and it is just not being understood by educators today.
The second thing the tutor could do was to say: "Now here is the next thing to do." That is what a programmed instruction does and I would put computers as teaching machines – we have the programmes already, they were published in text books thirty years ago – and I could teach . . . well, it's been done. In 1960 in Virginia, an 8th grade class went through all of 9th grade Algebra in half a year using teaching machines and hastily written programmes. That has been repeated and it's being used in industry very widely, because in industry if you overlook a better



way of teaching, your head will roll. But there is no one in the educational system in America who would be any the worse off if things go on just as they are.

What subjects would you have as the core curriculum for children? Well if you have this much advantage, I would give them all the basics. Then they would read fluently, be able to use mathematics well and then education would be a cinch. You'd give them some books to read and talk to them. The children in America today don't know how to talk. They grow up never having said anything. They take examinations but they don't say anything. They check what somebody else has said.

What advice would you have for a parent in bringing up a child? The parents can arrange the contingencies of reinforcement involving themselves and the child for mutual advantage and happiness, and without even having to simulate affection. For example, it's a very common thing in the home to adapt the ▶

◀ principles of 'leave well enough alone'. The child is off playing by himself and you decide not to go near him, for he'll only start to ask for a candy or something like that.

It isn't misrepresentation to remind yourself that the child is behaving in the way you want him to behave, hence why not join him and play with him a bit? If you give him your attention only when he starts to fuss, you'll only reinforce the fussing which is exactly what you don't want to reinforce.

I don't think there is anything wrong, dishonest or unethical about counselling a parent to make sure that he is not reinforcing the wrong things, but takes every opportunity to reinforce the right things. I wouldn't do it by simply saying 'Mamma loves you' unless Mamma really did.

We *must* be aware of what we are doing to others, and we must recognise that we are manipulating all the time. Whether we are doing it well or not is the real issue.

In your "How to discover what you have to say", you support a theory of teaching the child to learn what to do, to learn how to learn. You teach them how to study. To begin with it's got to be said. Education is the only profession which has not turned to instruments. Can you imagine a bank these days having a whole room full of pedagogues sitting on stools, with quill pens writing in ledgers? It's almost like that in school.

If a young human of today were to say to you: "Professor Skinner, do you have just a couple of things, guides if you like, for me for the rest of my life", what from your life would you give as your one, two or three main pieces of advice for a young person today. *Know thyself!* In order to understand what you are doing, why you are as you are, you ought to know something about behaviour. That could be done in a rather simple form with self-knowledge, self-guidance and self-advice, and then I would say examine yourself, find out what you want to do and do it. The wanting to do it is of course the thing.

In The Brain Club, what we're trying to do is find out a) about behaviour, b) about the brain and body and what it is. I'd appreciate your thoughts on how important you think it is to find out about your brain and your body as part of learning to know yourself. I would say the main thing is not to separate the brain from the body. The brain is *part* of the body. It all works together and it works as it does because of where it came from. The natural selection that produced you in the first place, then the personal history that has given you a very elaborate repertoire of behaviour during your life, and then of course very largely thanks to the culture in which you grew up.

May we ask why you decided to become a Behaviourist rather than a Mentalist? Well, that was an accident more or less. I was interested in literature while I was in college and I happened to subscribe to a very interesting magazine at the time (in the Twenties of course) called *The Dial* and in it Bertrand Russell wrote a review of Ogden & Richards "The Meaning of Meaning". At the end he said that the reader will see that he had taken the work of Dr. Watson very seriously. Well, I had never heard of Dr. Watson but I like Bertrand Russell very much so I got hold of a book of Dr. Watson's (it wasn't one of his best books at all but I was very excited about it).

He was an ice-breaker and I became a Behaviourist – I'd not yet gone to Harvard to study psychology. It set me in that direction and of course when I arrived at Harvard I found that as far as that department was concerned Behaviourism was nothing, but I held on and that's been the story ever since.

What were the defining characteristics of Behaviourism over Mentalism that decided you in its favour? First it's in the field of natural science rather than something called consciousness, which isn't really anything you see very clearly and was usually supposed to be a different kind of 'stuff', a different world, a spirit world, and of course by this time I was a good agnostic.

How would you explain 'concepts' in such a framework? Let us take for instance, inertia. One works with a small child and eventually says "Ah!, the child has now comprehended the concept of inertia." What does one mean by that? Obviously the child is now able to do things with respect to bodies having mass that he couldn't do before: but to say that he has the ability because he has the concept explains nothing. One has to explain where he got the concept from and in doing that one has to

go back to his experience with objects of different masses and how they move.
In fact the child has acquired behaviour with respect to certain features of the contingency to which he has been exposed. In other words, we get rid of a mentalist concept by turning to the contingencies.
Online computers and so on are replacing one by one the higher mental processes – we can now account for these things without appealing to 'higher mental states'.

The approaches you have outlined have split psychology almost literally into two groups – Experimental and Clinical – would you comment? The Behaviouristic branch of psychology is beginning to produce very effective clinical techniques in the application of contingency management to psychotics, the retarded, and the neurotic, as well as normal subjects in the school systems and penal institutions.
The difference is that clinical psychologists are mainly under the influence of Freud, who overemphasised the controlling self, the mind. Freud went back to prior environmental circumstances, for example sibling rivalry as a child, etc., but he felt he had to go through the Mentalist stage: your father spanked you when you hit your brother and now you're very uneasy about people because you feel anxiety.
Actually, if punishment when you were a child is changing your behaviour now, it's an effect on the behaviour, and what you feel is a by-product. You don't necessarily hesitate to join a group of people of your own age on account of anxiety engendered because you were punished as a child when you hit your brother. You may hesitate because earlier on, when associated with people of your own age you were punished. It's only the threat of punishment that causes you to be 'awkward' in your personal relationships.

In this context, how do you view behaviour and one of its major driving forces, love? Actually everything we say is an effort to alter the behaviour of another person. We are always manipulating, in a sense, though not overtly; not with any ulterior motive.
A psychiatrist will advise a parent: "Just go back and love your child and everything will be all right." What do they mean by love? You can't go out and buy a pound of love!

In the last 15-20 years there has been an astounding expansion in neurophysiology and a lot of work on the physiology of the brain. How do you relate that to behaviourism at the moment? I don't think it's particularly relevant. I am of course completely opposed to any effort to find something inside the individual which determines what that individual will do and that can be either what you introspect, what you feel, or it can be what you look at in other ways as a brain scientist. The whole question is if this is supposed to be something that originates anything. You overlook the fact that you have to ask where did it come from itself and the body, including the brain, is all the product of three types of variation and selection:

1. natural selection,
2. upbringing/conditioning and
3. the evolution of cultures,

which enormouslyincrease the range of upbringing/conditioning in a single lifetime and those three forms ofvariation and selection operate to get rid of the creative mind, just as Darwin got rid of the creative god.

If you take someone like, for example, Leonardo da Vinci, rather than describing him as a super creative individual, how would you describe him? Well, of course, I wouldn't be able to because I know nothing about his background. I might spend a lifetime trying to recover what happened to him, how he learnt to draw and paint and what sort of personal influences led him to do religious works and so on. It would have to be very detailed. I don't claim to answer questions of that sort. Newspapers call me up: what about this crime, and so on. I haven't any idea. I say call somebody else.

What is your position on the creative mind? I just don't think it exists. I think you have the body with the brain – it's all part of the same thing. When you behave, the brain is behaving too. That's all part of what you do. The brain doesn't cause the rest of your behaviour, it's *part* of your behaviour. The whole thing is due to what has happened to you, what has happened to your species and with what cultures you have been in contact. ●

On page 29 The Ionian reviews Professor Skinner's **Walden Two.**

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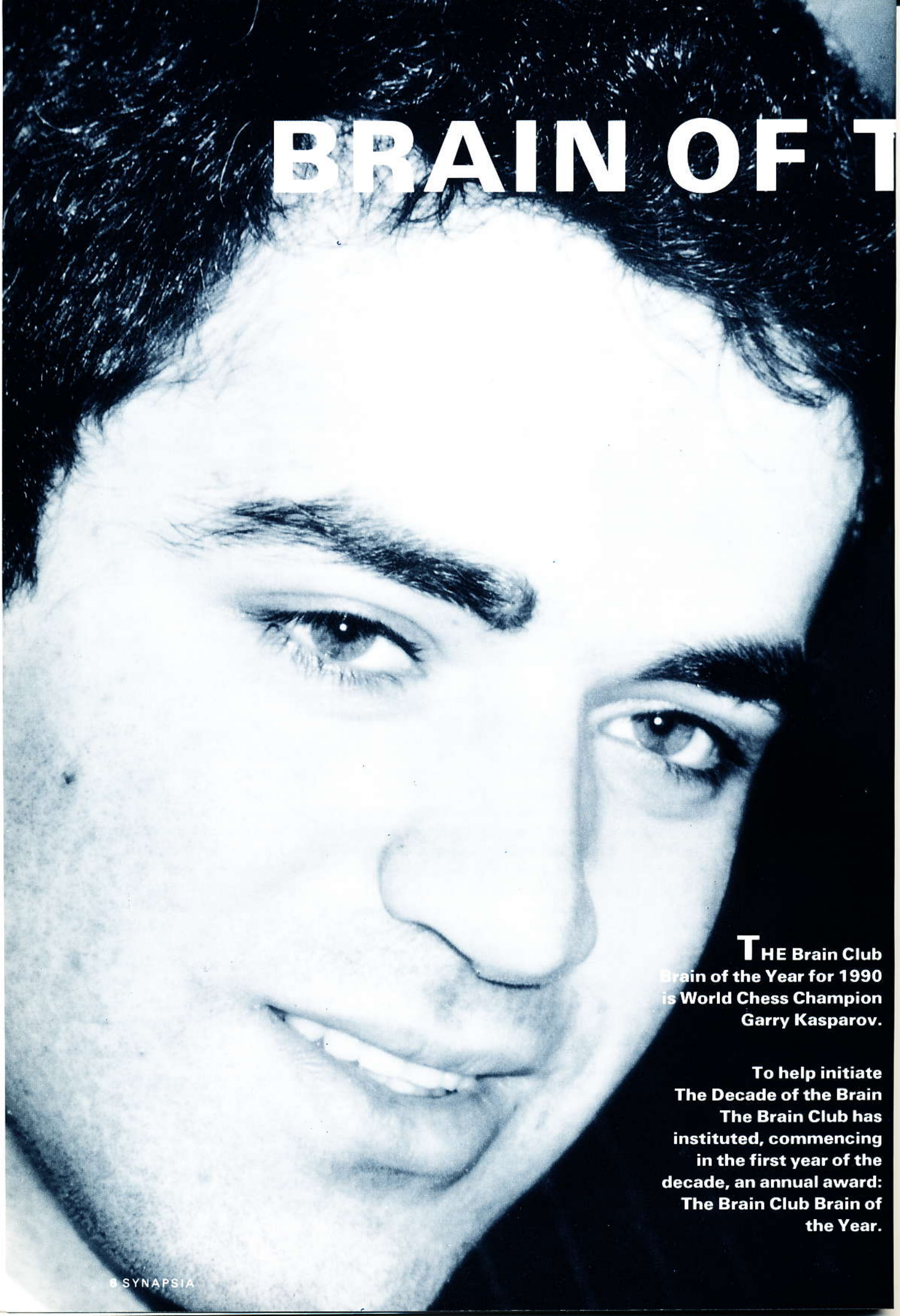


THE Brain Club Brain of the Year for 1990 is World Chess Champion Garry Kasparov.

To help initiate The Decade of the Brain The Brain Club has instituted, commencing in the first year of the decade, an annual award: The Brain Club Brain of the Year.

HE YEAR 1990

To qualify for and to receive this prestigious award, the individual must meet the following requirements:

1. The candidates must be pre-eminent in their chosen field of endeavour.
2. The candidates must have contributed major new creative developments to their field of endeavour.
3. The candidates must have made a notable effort to educate others in their chosen discipline.
4. The candidates must have incorporated the principle of **Mensana in corpore Sano** (a healthy mind in a healthy body) in their lives.
5. The candidates must have exhibited persistence and stamina over time.
6. The candidates must have demonstrated a general cultural awareness.
7. The candidates must have demonstrably contributed to their society.
8. The candidates must have also demonstrated a concern for humanity.
9. The candidates must be active and known on a global level.
10. The candidates must be a good role model for those in their field and for youth in general.

The 1990 Brain of the Year is Garry Kasparov, the World Chess Champion.

Mr. Kasparov ideally fills the qualifications for Brain of the Year:

IN January 1990 he became the first chess player ever to attain the chess rating score of 2800 on the world ranking list. In doing so he broke the previous highest score of the American chess genius Bobby Fischer – a ranking of 2785, which was widely thought to be unassailable. By the end of the year Kasparov not only managed to 'hold on' to that rating, he had consolidated it.

In further support of his pre-eminence in the chess world, Professor Nathan Divinsky produced a ranking list of the greatest chess players of all time, taking into account only those games by elite players played against the other elite. Professor Divinsky's ranking is a lifetime ranking, and not the traditional chess world's annual ranking. In the lifetime rankings, Kasparov placed **far** ahead of the number two and three greatest players of all time, Fischer and Karpov.

The world champion's creative contribution to chess is enormous. Regularly in championship tournaments and games he makes moves that are so outstanding none of the Grandmasters watching have the faintest idea why he made the move he did, until, after exhaustive analysis 24 hours later, they realise it as a brilliant innovation in what was thought to be a 'standard' position. As Kasparov says, his goal in chess is as follows: 'From the very beginning of a game, I strive to make it as sharp as possible and to take it outside the familiar patterns.' Indeed, so far has chess moved under his leadership, that even the great Bobby Fischer era of the 1970s is being described as a relative kindergarten to the Kasparov era of the late 1980s and what many are predicting will be the entire decade of the 1990s.

In the field of education Kasparov has made numerous contributions, including a number of lucid books on the game, and regular mass demonstrations for children and younger players in which he plays up to a hundred games simultaneously.

Garry Kasparov is a graduate of the Baku Institute of Foreign Languages, and speaks fluent English as well as other languages.

Friends describe him as a cultivated and curious man who closely follows literature, film and politics. Raymond Keene again writes: 'If chess needs a defence as a worthwhile sphere of activity it should be noted that Goethe, rated in **Synapsia**, Volume 1, Number 4, as the man with the highest IQ of all time (Rank 1 Goethe 210, **Synapsia**, page 26), described chess in his Rittersliches Trauerspiel Goetz von Berlichingen, as 'probierstein des gehirns' –**'the touchstone of the intellect'**.

On New Year's Eve 1990 Kasparov once again completed a successful title defence against Anatoly Karpov, the game's second best player of all time. The match lasted for almost three months and spanned two continents. As Keene says: 'I do not know of any other competitive mental exertion which is so arduous for the mind and body. The World Chess Championship, in terms of the mental and physical strain imposed on the contestants, dwarfs all other sporting competitions.'

To succeed at this level, Kasparov has to be superbly fit physically. He is a known sportsman, participating in running, football, cycling and ▶

swimming, and considers chess to be, as well as an 'art and a science' a 'sport'. Indeed, when he was in New York in October preparing for his World Chess Championship match, he chose an isolated house overlooking the ocean on Martha's Vineyard in Massachusetts, where he stayed with his wife, his mother and four trainers. He described a normal training day: 'First, I do physical training – running, tennis and swimming,' he said 'We rest. Then we start a six hour chess session. It's great!'

In 1985, when Garry Kasparov became world champion of chess at 22, he was the youngest person ever to win that title. He ably retained the title in 1990 in his fifth world championship clash with Anatoly Karpov. And now he has been named as Brain of the Year 1990. Encyclopaedia Britannica salutes the achievements of Garry Kasparov by presenting to him a 60-volume set of Great Books of the Western World, containing the collective wisdom of 130 of the world's greatest thinkers.

J.D. Adams, Managing Director
Encyclopaedia Britannica International Ltd.

Raymond Keene again confirms 'Kasparov has translated his ability to think decisively and quickly in the abstract sphere into the realm of harsh reality.' At the beginning of 1990, when riots broke out in Azerbaijan, which were life threatening to many of his family and friends, Kasparov, with commendable decisive resolution and speed of action, chartered a 'plane in Moscow (no mean achievement in itself!) and flew into the thick of the carnage in Baku, where he organised a convoy of lorries to ferry out all his friends and relatives, past armed road blocks, back to safety in Moscow. There he re-housed the entire batch of refugees, at his own cost, within a few days.

Far from being a blinkered sportsman immersed in the narcism of his chosen sport, he has an acute political conscience. He recently founded a political party to fight for democracy in the USSR, and a year ago predicted Gorbachev's invasion of the Baltic Republics – an unusual feat of political perspicacity.

The World Champion's energetic and electric personality has made him a household name in many countries around the world, and he, almost single handedly, has taken chess from a relatively 'elite' game to one that is now followed regularly by nearly a quarter of the world's population. So massive has the interest become, that the prize he recently won for retaining his World Championship was greater than that given to the winner of the Men's Singles Tennis title at Wimbledon.

In the middle of last year Kasparov accepted a challenge from Deep Thought, the world's greatest chess playing computer – a machine that had already demolished a number of international masters. In lightening-quick time, the human mind obliterated the best mechanical mind in history. So far in advance of the best computers is Kasparov's game and analytical ability, that Deep Thought's own programmers and operators were the deciding voice when Kasparov was falsely accused of utilising the computer to solve the 16th end game of his championship match against Karpov. Deep Thought's programmers publicly stated that their machine which can see **a million moves a second**, could only solve the end-game position of the 16th game **after** the first six moves of Kasparov's actual solution had been keyed in!

When asked why he had accepted the challenge, Kasparov responded 'To defend the dignity of the human mind!'

The programmers and others asked the world champion if there was any advice he had for those who were programming the next generation of Deep Thought. 'Yes' responded Kasparov, 'they should teach it to know when it is appropriate to resign!' This impish remark was stimulated by the fact that the world's best computer had stumbled on for at least 18 moves in a position that had become totally hopeless from the the very early stages of the game.

"I am absolutely delighted to have been nominated The Brain Club Brain of the Year for 1990 and I wish you every success for all your future endeavours."

"I am glad to see that chess has been selected as one of your major intellectual activities, and look forward to continuing to defend the dignity of the human mind."

Garry Kasparov

As the world has its film stars and rock stars, it also now has its Brain Stars.

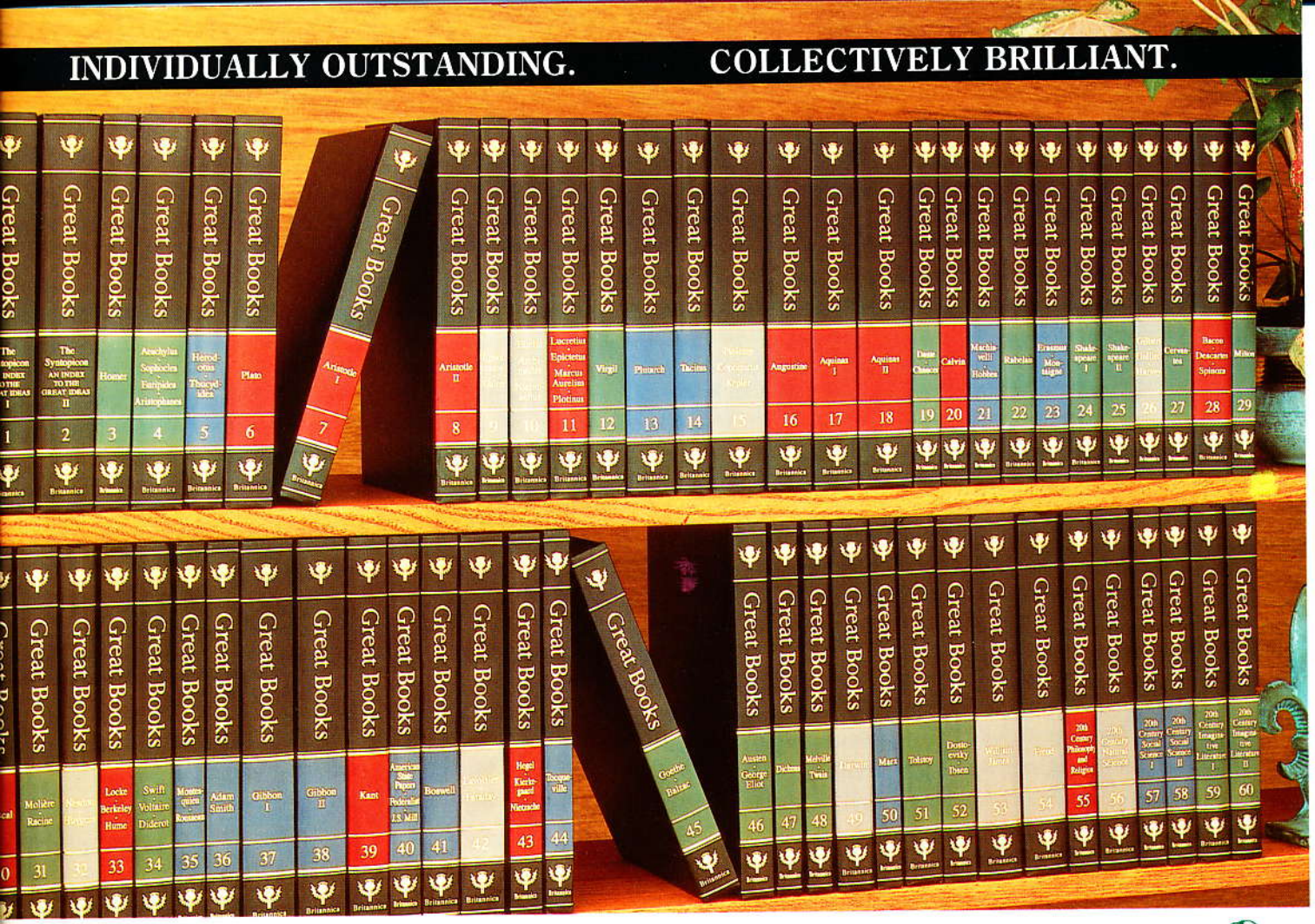
As a result of his stardom, tens of millions of children around the world are now emulating his example, and many movements have sprung up to make Chess and similar games such as Go a necessary part of a child's formative education.

The Brain Club and **Synapsia** congratulate Brain Star and 1990's Brain of the Year, World Chess Champion, athlete and humanitarian Garry Kasparov. ●

BRAIN OF THE YEAR 1991
BRAIN OF THE DECADE
BRAIN OF THE CENTURY
BRAIN OF THE MILLENIUM

AS THE YEAR 2000 APPROACHES, The Brain Club and its Members are presented with an opportunity that will not arise again for another thousand years: the opportunity to nominate, in addition to the annual Brain of the Year award, an award for the Brain of the Decade, the Brain of the Century, and the Brain of the Millenium.

Brain Club Members and readers of SYNAPSIA are encouraged to start thinking about their personal choices for these awards, and to send in nominations with reasons for their selection to the Editor of SYNAPSIA.



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THE FIRST BRAIN CLUB FLOATING

The first Brain Club Floating University was a resounding success! The University took place from 22 to 28 September 1990. In this feature, four Brain Club Members tell their own rollicking tales. The feature is illustrated throughout with drawings that were done by the new Brain Club art school! The 1991 Brain Club Floating University is already scheduled for Saturday, 21 September to Friday, 27 September, and Brain Club Members are encouraged to register soon!

In the Spring 1990 Issue of **Synapsia**, Volume 1, Number 2, we outlined what the 'future' University would be like. Mornings of learning, study, conversation and fun; afternoons of lunch, swimming, sleep, reading and play; evenings of dining out, visiting citizen towns, taking midnight swims and 'hanging out' on our 80 foot yachts.

Our crystal ball turned out to be true in all respects, with some added surprises!

Lorraine Gill, BCM 49, boat-resident-artist tells a rollicking tale of the week's events:

CARRY ON WITH HALIKARNAS YACHTING!

An artistic masterpiece could be viewed from the perspective of how the artist overcame problems and errors in order to create such a masterpiece. Shakespeare, Byron and Shelley would have understood this particularly in the case of the inaugural International Brain Club University in Bodrum, Turkey.

The cat was suddenly ill before I left. I lost the keys to the car. The flight was delayed by four hours (a technical fault). After a three hour drive into the unknown we were told in the dark that the chain preventing us from reaching our final destination across the quay would not be unlocked for us to board the boat; a row breaking out; and where in the . . . . . were people to meet us?

Would the chain come down? Would it not? It did! And we suddenly heard clapping from what could be seen as one of the most beautiful boats I had ever seen; in my state though, the food and wine were neon-lit; friendly faces bounced down the gangplank. We had made it.

The boats became characters of Turkish Myth, with engines that snuffled and snarled like sea-wolves; the crews perfect in artistic humanity creating gourmet paintings with food; and they worked their butts off for us.

Next morning, as we sailed off to Greece on the continuing Odyssey of 'missing and lost and found Brain Club Members', the boats danced the waves. Some members had made it to Turkey the day before from Greece but were not allowed off the gangplank and sailed back to Greece where we were now heading to try to get them back on the gangplank, which was Turkish.

In Rhodes that evening back in the dark, we couldn't find them and went to eat instead. Rhodes: a fascinating combination of East and West architecturally, and because no other person seemed to know much, I could wax lyrical on History without fear of contradiction!

We still could not find them next morning, and we could not find each other either, and finally when Tony Buzan appeared with a giant sponge on his head as an optical device of recognition I decided that this was definitely a 'Carry On' of the highest order, and Shakespeare, Byron and Shelley would definitely have approved. I knew this would be an important learning experience; associated with flexibility, patience and skills definitely different to other journeys I have made – this trip would be a riot!

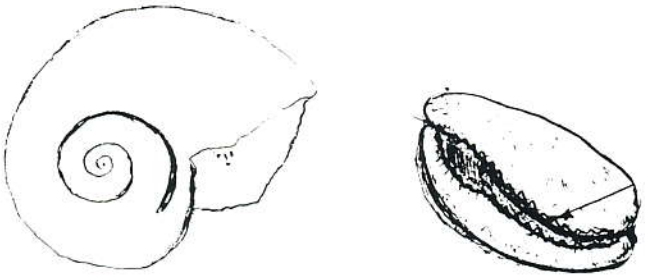
We had left the other members in Greece unable to step on to the gangplank, after coming from the Bahamas especially for the University; Sean and Gina would have been invaluable to the University, and exercised the greatest skills of flexibility, patience and tolerance under bureaucratic chaos.

A calm bay, and our boats snuffled and growled to a halt choking out salt spray. The other members cheerfully set out for a brisk pre-dinner walk after enjoying the churning seas, but I declined and settled for a Raki drink to settle my churning stomach. Interesting conversation, impeccable food, memories of the sun setting, a falling star, and other boats always being passed by our Captain who had a smaller engine, and seemingly larger determination.

We were given the name of the 'Dignified Swimmers Club' by Tony after the first swimming lesson, where all our idiosyncrasies were humorously mimicked by Tony. Jean was afraid of putting her face into the water, Klaus was all style and got nowhere, Vanda disappeared into the distance, and I could see sharks in every droplet etc. Later we were all to change our ways under Tony's expert guidance.

With all due modesty, the drawing and perception lessons were retained

and resulted in excellent drawings from all students who now understand they are artists if they wish; the only delinquent being Tony, founder of The Brain Club, who vehemently discussed my lesson to the



Illustrated by Floating University Participants

point of nearly being thrown overboard; his teacher had not liked his drawing of a boat when he was a child, but needless to say Tony became an example of his own methods of learning by producing a damned good drawing.

We found ourselves in an amphitheatre the next day, layers of Greek, Byzantine, and Roman civilisations; more interesting observations and learning as we walked and looked down at our boats resting quietly waiting for us. Always something to see, something to learn, something to laugh at, as once again our Captain passed the other boat whose Captain danced, jumping up and down with no person at the wheel; he knew what he was doing; then our boat stopped.

Shades of the Ancient Mariner appeared this time: becalmed on an ancient sea, the Albatross waiting somewhere as the other boat, thinking she had us this time, chortled and glided away into the horizon. Jaws not very far away in my mind's eye; and Shelley arose from the waves. Merjan's Captain took pity, for around he came and a death defying act of passing oil ensured that the Mariner faded.

The last night: dancing on the dancing boat; Turkish; and laughter and toasts to The Brain Club and all who sail with her; to Tony Buzan for the organisation; the idea; the success; the originality; she was launched. As I said, a Masterpiece can be viewed from the perspective of the problems and errors overcome, and the first Brain Club University was a Masterpiece compared to a Comedy of Errors resulting in a brilliant finale.

Sadness on the morning of leaving as each party bounced down the gangplank to various destinations; Jean Buzan and I waited, the last party to leave, when a gale blew up and the boats tugged at the moorings; Jean saved my passport, inside my handbag, from Shelley; I wondered if Turkey had tried to tell me something; the boats had to negotiate a turbulent harbour and try to dock alongside other boats. Being brave, I made Jean go over the high gangplank first, where she was tenderly held and safely landed.

Here's to The Brain Club; to Tony Buzan; to Turkey; Bodrum; and next year's Carry On with the Floating University! See you next year! ●

Read in the next issue *more* about the holiday which Klaus Hoffman, BCM 320, Personnel Director for Hewlett Packard in Germany, described as 'the best holiday of my life.' ●

For this year's Floating University, 21st to 27th September, see advert on back cover.

UNIVERSITY

1st of 2 Parts

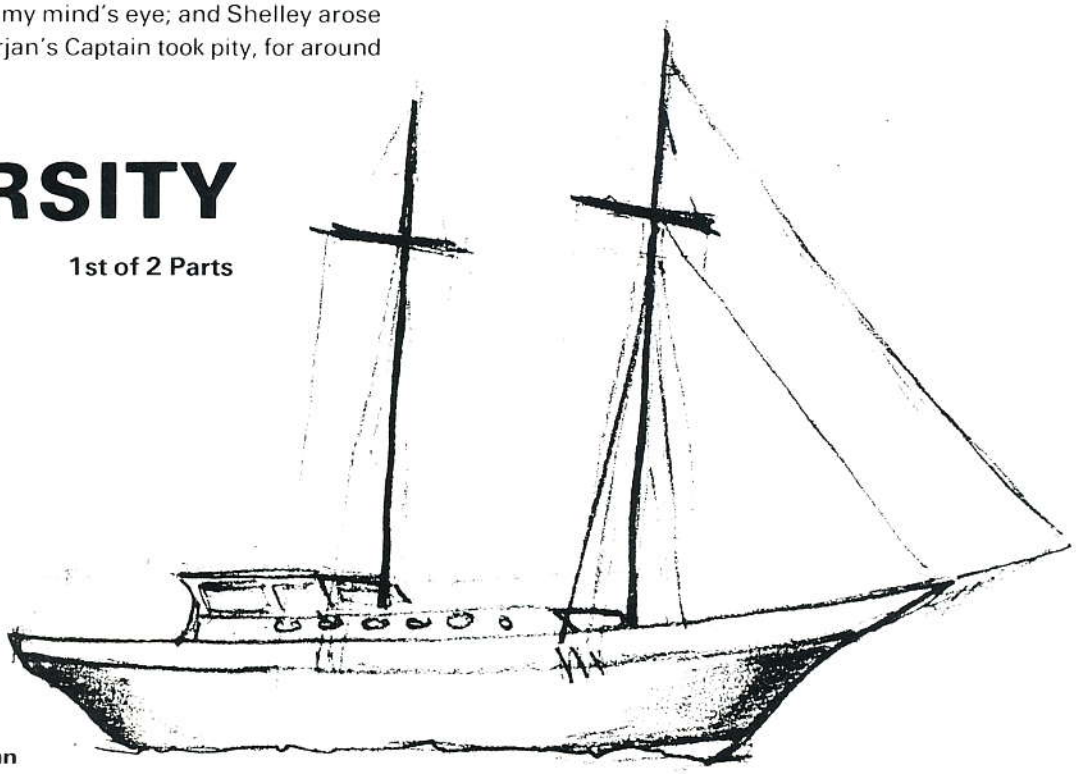


Illustration by Klaus Hoffman

GET A HEAD

To get a broader perspective of the educational needs of today, let us look at a few facts; get your responses to some questions on educational issues; review some stories; and see what awareness this provides, directions it suggests, and what actions can be taken.

by Vanda North BCM 2

FACTS

FACT: John Naisbitt, **MegaTrends 2000 (Synapsia** Vol. 1, No. 2, Spring 1990) says '. . . interest in learning **HOW WE LEARN**, and interest in how the brain works, **MUST** increase dramatically. It must become a preoccupation for many of us in all our global societies.'

FACT: President George Bush (same issue of **Synapsia**) 'the decade beginning January 1st 1990 hereby is designated the 'Decade of the Brain'.'

FACT: Teacher recruitment in 1991 in the United Kingdom is 50% higher than in 1983 and the highest since 1977.

YOUR RESPONSES

Please complete the questionnaire shown on page 14 and look at your answers to the questions; if they are similar to the response of thousands of others a clear picture emerges:

- We have never been taught HOW to Learn. (The process of learning should not be confused with the content of the subject being taught.)
- We need this skill more than ever as we become more immersed in the 'Information Age' and more removed from the previous 'Industrial Age'.
- World thinkers and politicians recognise, support and advertise this need for the first time.

NOW

What are we going to do?

Start a great interest in becoming 'Mentally Literate'. Learning about our brains and how amazing they are.

Begin learning how to learn early in life (the author teaches children from 5 years upwards).

Develop an attitude of romance, mystery, intrigue towards learning and commence a journey of discovery about ourselves and how we function.

STORIES

'Oh! The stories we can tell!'

How many times people have confided tales of anger, embarrassment, hurt, or hopelessness concerning an episode where they felt 'stupid'. These were documented and supported by a system that did not allow their full intelligences to be used.

Oh! The stories some can tell!

Of the enormous difference that can be made by simply knowing about the basic 'hardware' in your brain – a million, million brain cells – for example.

Of being given a 'user friendly software program' such as Mind Mapping to turn hard work and furrowed brows into a smile of delight as information pours forth with ease.

Two examples follow, one from a young man and his experience with Mind Maps and the other a school dedicated to and enthusiastically Learning about Learning.

THE JAMES LEE STORY – A Matter of Self-Realisation

"Having been away from school for over six months due to illness, and with only twelve months until public examinations, I faced a difficult choice: drop a

USE IT!

year or try to somehow catch up in time. Driven mainly by a fear of having to make new friends, I chose the latter.

It was one of those crazy situations where success was so unlikely that I had nothing to lose. I decided to go full out. Not only was I going to pass those exams, but I was going to do well in them, and, most important of all, I was going to enjoy it. One small problem did however remain – just how should I go about fulfilling what seemed at times to be nothing more than a crazy dream?!

By good fortune I came across Buzan's books **Make The Most of Your Mind** and **Use Your Head**. Hmm, some interesting concepts. Maybe these could help me on my path to success? I had little time to go through all the techniques, so I decided to concentrate on just one of them. **That was Mind Mapping.**

After teaching myself how to Mind Map I set to work Mind Mapping as many of the notes that I had previously made as possible. It took time, yet became immensely satisfying. At the end of it I was left with concise and colourful notes that were my own 'creation', and therefore totally memorable.

Time passed and the exams came about. As the books advised, I took them with a positive attitude. I had done as much as I could.

My results certainly took everyone (including myself!) by surprise. Out of the ten subjects that I had taken I managed to obtain seven A's and three B's.

I can honestly say that there is no way I could have achieved them without Mind Maps.

Realising that Mind Mapping really did work led me to make a more detailed study of Buzan's work. Over the last couple of years, I have used techniques like speed reading, memory systems and positive

James Lee BCM 3

thinking in my everyday studies and life. I also set up a society at my school to encourage others to do the same.

These new learning techniques have helped me improve my grades at school. They have also given me a more positive view of life as a whole. I have now developed an inner strength and an increased confidence in my own mental ability. Everything is interesting. Nothing seems impossible any more!

I personally owe a great deal to techniques like Mind Mapping. Without them I could never have achieved my most recent success of a place at Durham University to read psychology. I cannot, however, emphasise enough that I am no extraordinary individual. Tony Buzan's work offers at least as much to everyone as it has to me. It's solely a matter of self realisation. **Who knows what the future holds for us all?!"** ●

Doherty High Success Learning Festival with Tony Buzan "On December 6, one hundred twenty High Success Program (HSP) students of Doherty High School in Colorado Springs, Colorado participated in a LEARNING FESTIVAL facilitated by Tony Buzan. This was the first one of its kind in the world. The students had been preparing for this event since school began in the fall. The preparation included viewing, participating and practicing the learning techniques presented in Tony Buzan's video seminar, "Developing Family Genius". Mr. Buzan visited the students in early October. At that time he discussed some of the techniques they were learning, including Mind Mapping, range reading, and improving one's memory.

During the Learning Festival the students utilized the "Group Study Technique" developed by Tony Buzan. Mr. Buzan divided the students into three groups. (He had picked three books from the students' curriculum). One group studied **To Kill a Mockingbird**, the second group, their biology book, and the third group, their health book.

Speed reading, Mind Mapping, and total concentration abounded throughout the day. The students were beginning to realize that this technique REALLY WORKS! Along with their forty minute study times, they enjoyed ten to fifteen minute breaks. They also tried their hands at juggling.

The culminating activity included a student from each group sharing their Mind Maps and knowledge gained from each of the books. The day ended with a celebration of punch and a cake decorated with a Mind Map.

Mr. Buzan, the teachers, and students felt the whole festival was an uplifting and rewarding SUCCESS!"

FUTURE

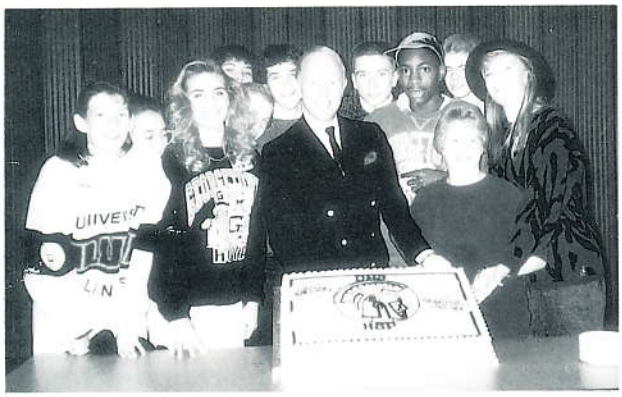
The Goal: for all people to Learn How to Learn; to be aware of and develop their full range of capabilities.

Think of the world this would create!

RESOURCES

WE HAVE:

- Knowledge of how the brain works, and some ▶



Doherty High School Students

simple and highly effective ways that mirror and amplify its operation.

- Global networks, and media methods to teach this to people.
- The historic institutions of FAMILY, RELIGION, COMMUNITY, SCHOOL and WORK as the blood-stream through which the information can be pumped.
- The need to know.

WE NEED:

- People – family members and friends, groups and associations, schools and colleges, associates and colleagues to teach one another.
- Schools to incorporate Learning How to Learn within the Basic Curriculum.
- To use Brain Compatible Methods and techniques such as Mind Maps when teaching subjects.
- Emphasis, delight, fun and games on/with our magnificent minds.

NEXT STEPS

Consider how YOU want to be involved.
Create a **Network** of all people currently aware of and using brain compatible strategies, i.e. Mind Mapping.

- Begin **Model** projects, where teachers, schools, universities, families, and corporations record and show their successes.
- Document **Research** on the effectiveness of these methods, to show emphatically what we already know.
- **Link** appropriate associations together for the benefit and enhancement of all, especially those needing their assistance.
- **Broadcast** far and wide, what works, how and why, so that many people benefit.

How are **you** going to be involved? Let the stories of the future be good ones about our minds and our celebrations of their amazing abilities. ●

PHOTOCOPY THE FOLLOWING QUESTIONNAIRE AND PLEASE RETURN TO THE BRAIN CLUB HEADQUARTERS:
(Please use a scale of: 5 as YES/GOOD and 1 as NO/BAD – ring number as applicable)

QUESTIONS:					
How do you feel about our present educational state?	5	4	3	2	1
If you or your children are currently studying are you satisfied with the standard?	5	4	3	2	1
Do you believe there should be more emphasis on 'the basics', i.e. reading, writing, maths?	5	4	3	2	1
Do you/r children know about the different mental skills and processes in the brain?	5	4	3	2	1
Were you/they taught different styles of note taking and their effectiveness?	5	4	3	2	1
Do you/they know about Memory Rhythms, and how to ride the peaks and valleys for effective study?	5	4	3	2	1
Do you/they know how to increase concentration when you want to?	5	4	3	2	1
Do you find you forget more than you want to?	5	4	3	2	1
Do you know about the nature of how your eye sees in relation to effective reading?	5	4	3	2	1
Do you read fast enough to keep up with your current reading material?	5	4	3	2	1
Do you know how to develop Mental Fitness, such as the 'Great Brains' had?	5	4	3	2	1
Do you want to improve in any of these areas? Mark with a *	5	4	3	2	1

NAME .....

B.C.M. No. .....

ADDRESS .....

.....

ANIMAL INTELLIGENCE

MONKEYS

MIND-READING MONKEYS?!

A recent experiment on the ability of monkeys to recognise each other's 'states of mind' reveals far more about the limitations of the human mind to perform the experiments than about the limitations of the 'observed' primates.

Dorothy Cheney and Robert Seyfarth of the University of Pennsylvania attempted to test these empathic abilities with two species of macaque (Animal Behaviour, Volume 40, page 742). In order to discover whether female macaques could attribute mental states to their young, Cheney and Seyfarth placed mothers in cages from which they could see a test arena. They either put down a plate of appetising food, or sent in a threatening human 'predator', who subsequently hid behind a screen.

The researchers allowed the female's offspring to stay with her in half of the trials, so that they could see also what was happening in the arena. In the remaining 50 percent of the trials, the monkey children saw nothing of what went on.

The young who had seen, and young who had not seen, were then all allowed into the arena.

The zoologists 'reasoned' that the mothers of the 'ignorant' young ought to make more of a show of alerting their infants. The experimenters expected the mothers to make either soft, hooting 'food' calls or more alarmist calls referring to the 'hidden predator'.

Cheney and Seyfarth found no difference in the behaviour of any of the mothers, and concluded that the monkeys therefore do not consider what other monkeys' moods are likely to be, the desires they might have, and that the macaques therefore cannot 'put themselves in another's place, unlike humans'.

Any human who has observed monkeys either in captivity or in the wild will know that they are **especially** sensitive to other creatures' moods and desires, and will hopefully persuade the likes of Cheney and Seyfarth to open not only their minds but also their eyes before they embark on further innane experiments which purport to have discovered the limits of another animal's understanding, but which in fact reflect only the limits of their own.

GROOM AND FEEL BETA

A more elegant experiment on monkeys was performed by a research team led by Eric Keverne, a neuropsychologist at Cambridge University in England. Keverne and his team monitored the brains of a group of monkeys while the animals were grooming each other. The scientists found that during grooming, the brains of the monkeys produced increased amounts of beta-endorphin, one of a class of chemicals that are often referred to as 'the brain's personal opium'.

Endorphins 'plug' into the same brain receptors as do such narcotics as heroin, morphine and opium, and produce similar feelings of well-being. Keverne and his team then performed a number of investigative experiments: first they gave the monkeys naloxone, a chemical that blocks the brain's reception of endorphins. As if to compensate for the ensuing lack of endorphins, the monkeys became more irritable and subsequently increased their grooming.

In the second investigation, Keverne injected the monkeys with small doses of morphine. It appeared that because the brain had had its narcotic 'fix', behaviour designed to increase the dose (grooming) was no longer necessary. The monkeys did in fact decrease their grooming behaviour.

Keverne and his team conclude that there is probably a biological need for social interaction through non-sexual touching, and that this need is so strong the brain rewards such touching by producing a natural 'high'. Says Keverne 'I don't know if this explains why teenage girls like to do one another's hair, but I do suspect that tactile contact is important for social interaction at **all** levels.

CHIMP CHAMP

A chimpanzee has learnt the use of Stone-age tools. Kanzi, a male pigmy chimpanzee living in the Yerkes Primate Center in Atlanta, Georgia, (Atlanta Brain Club Cell take note!) can make and use stone tools, much as our human ancestors did more than two million years ago. Kanzi is able to strike sharp flakes off a cobble held in one hand with a hammer stone which he holds in the other.

Nicholas Toth, a archiologist studying at Indiana University, says 'This is the first recorded instance of a non-human species making tools in this very human-like manner. We will be able to learn a **tremendous** amount about the cognitive capacity of our early tool-making ancestors by studying Kanzi.'

This paradigm-busting advance in the study of human evolution is considered so important that Kanzi's human co-workers are to make him the first recipient of an achievement award to be given annually by the Center for Research into the Anthropological Foundations of Technology at Indiana University. 'Kanzi has told us more about this aspect of human evolution than we could have ever hoped,' Toth says.

The chimpanzee's new-found technological abilities arose as the result of a meeting last summer in Portugal. At a conference on Tool Use, Language, and Social Behaviour, Nicholas Toth met Sue Savage-Rumbaugh, a psychologist at Yerkes who had been working with Kanzi for ten years on language acquisition, and who had become known as one of the major researchers into animal intelligence. Kanzi had been 'top of the class' in Savage-Rumbaugh's primate university and Toth wondered whether the young chimpanzee might also do what no chimp had done before: use one tool (a hammer stone) to make another tool (a sharp flake).

As *New Scientist* Magazine says, 'Anthropologists have been obsessed for decades with the cognitive dividing line between humans and apes.' It is once again a sad comment on our attitude towards animals that our obsession is to divide rather than to find commonalities.

Happily the chimps are breaking the boundaries. One potential dividing line had been language, but apes have now been shown to be able to use both vocal and sign languages.

Another dividing line had been the use of tools, but then Jane Goodall and others observed many chimps using tools for hunting for termites, and for breaking open nuts.

The hope of the 'dividers' lay now in the fact that no ape had ever 'manufactured' tools for making tools.

A few years ago an orang-utan at Bristol Zoo was taught how to bash a large cobble with a hammer stone to make a sharp flake, with which it cut a string to get a reward. This was considered however to be a very artificial situation, and 'not at all the way humans make stone flakes'. As Toth said 'Tools for making tools seemed to be the limit.'

At the end of last summer, however, Toth visited Kanzi. The young chimpanzee easily learnt within a day how to use a sharp edged flake for cutting string around a box, which contained a reward. It took some weeks for Kanzi to grasp the trick of making the flake in the first place. He was resourceful, however: while indoors he realised he could throw the cobble hard on the floor, and smash it into pieces. He would then search among the rubble for a fragment with a sharp edge. With this he would then cut the string.

Having being momentarily outwitted by Kanzi, Savage-Rumbaugh and Toth from that time on always did their experiments outdoors in the chimp enclosure!

'Eventually we were able to teach Kanzi how to make the flakes in the typical human way' says Savage-Rumbaugh. She now wonders whether Kanzi will actually teach other chimps how to do the trick, providing an interesting example of cultural transmission in the realm of technology in the ape world. The human world will watch with fascination to see if this will happen without their intervention. ●

AMAZING MEMORY STORIES

The Greek King of the Gods was Jupiter. Jupiter symbolised for the Greeks energy, power, and a universal force.

Jupiter ruled over the kingdom of Olympus, as well as the kingdom of Heaven and Earth.

As a typical Greek God, he was endowed with super-human strength and qualities, and also with 'weaknesses' that made him more 'interesting' and understandable. Jupiter's great weakness was his love of women.

So impassioned and lustful was he, that he would go literally to any lengths in order to conquer the object of his desire. Over his enormous lifetime he used to roam the heavens and the earth, especially looking for the most beautiful goddesses, half-goddesses and mortals.

If anyone of those who he desired initially rejected him, he would delve deeply into their imaginations, fantasies and dreams, find the object of their greatest love and admiration, turn himself into it, and seduce them in this way.

Fundamentally, whoever he desired he would eventually bed.

With this infinite range of choices before him, it is therefore especially interesting to find out with which woman, apart from his wife Hera, he spent his most extensive romantic time.

The lady in question was a Greek Goddess by the name of Mnemosyne. Zeus spent nine consecutive days and nights in her passionate embrace.

Mnemosyne was the Goddess of Memory, and it is after her name that the name 'mnemonic' (memory) techniques is derived.

Of further great interest in this tale, is the fact that as a result of their nine days and nights of lovemaking, Mnemosyne gave birth to nine children. These children were the Muses, those goddesses who preside over the following nine areas of creativity:

Erato	Love Poetry
Calliope	Epic Poetry
Polyhymnia	Hymns
Terpsichore	Dance
Thalia	Comedy
Melpomene	Tragedy
Euterpe	Music
Clio	History (the memory of the race/tribe)
Urania	Astronomy

In this fable, the Greek story tellers had intuited a major psychological discovery: that if you put energy into memory, the result will be creativity.

Thus the energy you are putting into your own memory at this moment, will reward you not only with a superpower and superbly enhanced range of memory skills, but will also increase your entire range of creative thinking abilities. ●

ecomes a Charity!

1

Commission made
in Club: 'The above
central register of

ll its Members are:

0

"To promote research into study of thought processes, the investigation of the mechanics of thinking, manifested in learning, understanding, communication, problem solving, creativity and decision making; to diseminate the results of such research and study and to promote generally education and training in cognitive processes and techniques and to develop and exploit new techniques in cognitive processes."

2

This issue of *Synapsia* is filled with articles, ideas and requests relating to our objectives, *please* get in touch with *Synapsia*, Susy Churchill, our new Chief Administrator, and your local Cell Members to help support us with our new responsibilities, freedoms and initiatives!

ABOUT INTELLIGENCE

THE BRAIN, SEX AND THE ORGASMATRON

Synapsia readers may well have seen Jane Fonda in 'Barbarella' and Woody Allen in 'Sleeper'. In both films the stars were involved with sex machines, Woody Allen emerging happy and dishevelled, and Barbarella's machine emerging similarly!

A genuine orgasmatron will be commonplace within ten years, predicts Milton Wolf, Head of Acquisitions for the Getchell Library of the University of Nevada at Reno. Wolf regularly lectures at robotics conferences on such developments, and says that

The success of the equipment will depend on the capacity of the brain to image and fantasize.

computer induced sexual experiences will be readily available thanks to pioneering studies in imagination and virtual reality.

Sexual explorers will hook themselves up to a virtual reality programme similar to a flight simulator. They will then call up their favourite sexual partner, establish their fantasy, and initiate, by thought, the reality. The effects are produced by users receiving feedback from PC-linked biosensors attached to their bodies and sexual organs, resulting finally in orgasm.

'The evolution of mankind is going to be for many of us a relationship with our machinery that is extremely intimate' Wolf says.

Will they be successful? We leave it to your imagination!

THE BRAIN, SEX, LOVE AND ROMANCE OR WHAT DOES A BRAIN WANT TO HEAR A BRAIN SAY?!

USA Today's Nanci Hellmich recently surveyed top-selling romance writers to discuss the qualities in heroes and heroines that were most sexually appealing.

The results should be particularly satisfying to Brain Club Members:

1. Judy McNaught (**Almost Heaven**): Ideal hero: 'Strong. Witty. Intelligent. All my heroes are good communicators.' Ideal heroine: 'Very close to the hero. A sense of humour. Intelligent.'
2. Heather Graham Pozzessere (**Forbidden Fire**): Ideal hero: 'Fun to be with, honest, bright.' Ideal heroine: 'Someone who definitely has a mind of her own. Intelligent, smart, willing to take chances.'
3. Donna Hill (**Rooms of the Heart**): Ideal hero: 'The man of your dreams, strong but can be gentle. Career oriented.' Ideal heroine: 'She needs to be strong, determined. Someone who can handle both a career and love life. Intelligent, gentle, usually attractive.'
4. Bertrice Small (**The Spitfire**): Ideal hero: 'A man who is intelligent, willing to learn from a woman. A man who has a sense of humour.' Ideal heroine: 'I like a woman with a sense of humour. You need more than just a beautiful woman who responds to sexual overtures. She needs a brain!'

The brain and intelligence came top of the sexual hit-parade . . . .

THE SISTINE BRAIN? Michelangelo's 'Creation of Adam' painted on the ceiling of the

Vatican's Sistine Chapel contains an image that has been misunderstood for 478 years, claims Dr. Frank Lynn Meshberger, of St. John's Medical Centre in Anderson, Indiana.

The fresco, completed in 1512 for Pope Julius II, shows Adam and God reaching towards one another, arms outstretched, forefingers almost touching. Many scholars have interpreted the painting to symbolise God bestowing life on Man, God being shrouded in a great cloak.

Dr. Meshberger contends that this is a massive misinterpretation, and that the cloak is actually a huge brain, symbolising God bestowing **intellect** on Mankind. Meshberger points out that in the painting Adam's eyes are already open, suggesting that he was already alive and was therefore receiving **another** gift.

'Look at the image that surrounds God and the angels' Meshberger wrote in an October edition of the **Journal of the American Medical Association** 'this image is the shape of a **brain**'.

GREAT BOTTLED BRAINS!

The University of Tokyo's Medical Department has begun to collect the brains of the 'greats'. Their collection already numbers 120 brains, and includes those of Prime Ministers, novelists, artists and scholars.

Scientists there hope to gain some insight into what makes the brains of famous people special.

"We'd like to get many more," said Yutaka Yoshida, curator of the collection. "I'd especially like to get brains from mathematicians, musicians and singers."

The collection was begun in 1913, when the family of Taro Katsura, a three-time prime minister, asked that his brain be preserved for study after his death. The newest acquisition is the brain of former prime minister Takeo Miki, who died in 1988.

University researchers have cross-sectioned several brains to allow some visual and microscopic comparisons. Most are undisturbed, however, immersed in amber formaldehyde, gleaming palely behind small handwritten cards giving the names and special qualities of their original owners.

As curator, Yoshida has renewed efforts to learn from the colection of famous brains.

The brain of Hisashi Hamaguchi, an eloquent prime minister assassinated in 1931, looks about the same as that of Natsume Soseki, a famous novelist who died in 1916, or of Yasuko Miyake, a writer who provided the only female brain in the collection.

"Researchers say the fibres in the part of Hamaguchi's brain that controls speech are very complex, very special," he said, referring to a part of the left hemisphere that regulates speech and other motor functions in right-handed people.

Many universities keep frozen or preserved brains for research purposes, but none has a collection of geniuses, Yoshida said.

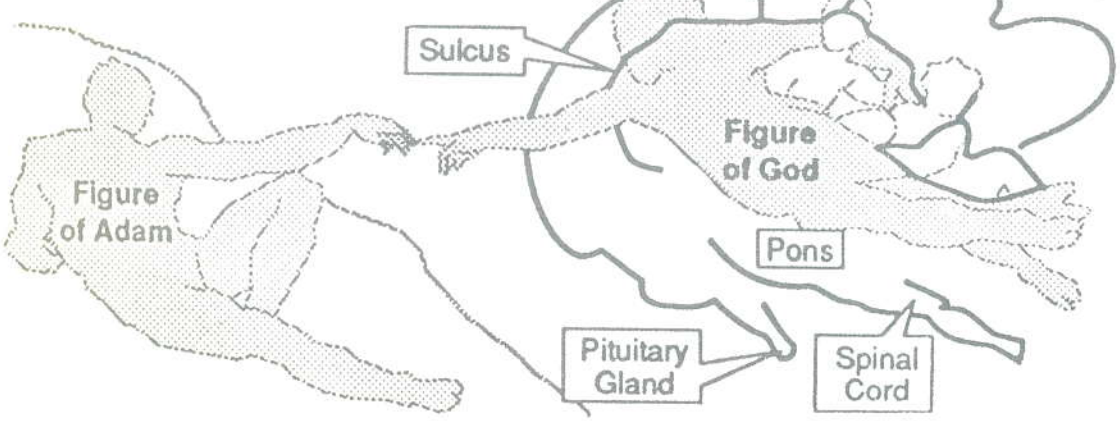
The Tokyo collection resulted from a preoccupation with the differences between Asians and Caucasians, men and women, geniuses and average people, that emerged during the Meiji Era (1868-1912), when Japan began in earnest to study western science and technology.

Eventually, Japanese medical researchers began to study brains, with some controversial results. The brains of some famous people, they found, were heavier than those of less distinguished mortals.

Japan's heaviest brain of record was that of Torasaburo Araki, a politician and doctor who left 1,627 grams of grey matter behind when he died in 1942, and prime minister Katsura's brain was second at 1,587.6 grams. The average Japanese brain is said to weigh 1,289.9 grams.

"It seems as if great thinkers may indeed have heavier brains," said Yoshida. "But then, so do many criminals, I hear. Maybe they have a different sort of intelligence."

Synapsia readers are encouraged to write in with their views and evidence on these matters. ●



THE MIND SPORTS

Synapsia updates its readers on the world's first 'Mental Olympic Games' – the Mind Sports Olympiad, to be held in England in the Spring of 1993. In this issue we chart the history of the development of mankind as a gamesplayer, and reach the conclusion that a Mind Sports Olympiad is an evolutionary inevitability!

Since the first introduction of the Mind Sports Olympiad to the world in the pages of the Spring edition of **Synapsia** Volume 1, Number 2, 1990, the concept has increasingly taken hold of the public imagination. Companies are already sponsoring, and individuals are preparing for the various events.

THE MIND SPORTS OLYMPIAD GOALS The Mind Sports Olympiad goals have now been defined and finalised. They are as follows:

1 To bring the Olympic ideals to mind games and skills.

2 To provide serious competition and fun to all those interested in mind games and skills.

3 To educate people to the fact that learning in these areas can be both easy and enjoyable, and that mind skills in **any** area can be nurtured and improved.

4 To establish recognized standards and world records.

5 To initiate the next new Major World Event.

6 To raise the worldwide level of Mental Literacy.

7 To make the event profitable and to repeat it, in a different city, every two years.

8 To demonstrate that after 10,000 years of "civilization" the human race is beginning to recognize that its future lies in the greater use and development of its main asset – the human brain.

THE EVOLUTION OF THE INTELLIGENCE OLYMPICS

In answer to the question 'Why a Mind Sports Olympiad?' we refer you to the evolution of the human being as a mind-games player, and to the evolutionary history of those games themselves.

Since the dawn of civilization some ten thousand years ago, history has recorded that man has been a games player. The earliest writings of ancient civilizations regularly make reference to games similar in concept to tic-tac-toe (noughts and crosses). As a civilization progressed, so did the complexity of its games.

The trend of the growth of games over the centuries has been a fascinating one, and has now reached a point of critical mass that not only gives rise to, but inevitably leads to the Mind Sports Olympiad. Fascinatingly, all major games have followed an identical growth pattern:

Stage 1. A single originator or small group of originators come up with a new creative idea for a game testing mental skills.

Stage 2. The new game is introduced to a wider range of players, and a small band of cognoscenti forms a loosely knit group of players.

Stage 3. The loosely knit group becomes an informal "club".

Stage 4. The club becomes more formalized, and multiplies, giving birth to other clubs similar in form to the original.

Stage 5. Players emerge who become the recognized leaders, experts and theorists of the game.

Stage 6. Formal competitions are organized, and local champions appear.

Stage 7. Literature is produced on the background and theory of the game, and formalized rules become established game-law.

Stage 8. National and international competitions arise, and a world champion is crowned. Concurrent with this stage is the proliferation of articles, magazines and books on the subject, and the evolution of different "schools" of thought on the game.

A natural limitation to the growth of games has been the fact that in most instances the number of players is two, occasionally three or four, and rarely more. Unlike a physical

OLYMPIAD-UPDATE

sporting event the diminutive size of the board usually limits spectatorship to a handful. Contrast this with the number of spectators in the Roman Coliseum or the modern sports stadium, and we can readily see one of the reasons for the historical dominance of physical sports over mental games as spectator events.

Despite these limiting barriers to the growth of mind sports as spectator events, the expansion in recent years has been staggering. The game of chess, once perceived as a contest for old men with grey beards, first hit the front page headlines in 1972 when the mercurial American genius Bobby Fischer wrested the World Championship crown from Russia's Boris Spassky in Reykjavik. Since then, chess and its most prominent personalities have increasingly become media stars.

A measure of the growth of interest in mind sports is reflected in the increased prize fund for major contests. In 1969 the World Chess Championship match was worth around 3,000 roubles (less than £2,000) to the winner. In 1990 Kasparov and Karpov contested a purse of £1.5 million, which is considerably in excess of the top two prizes at Wimbledon or any golf tournament.

Concurrent with the explosion of interest in mind games, is a similar explosion of interest in measuring mental skills, competing in them, and forming organisations based on them. Witness the dramatic growth of Mensa, the high IQ society, whose membership in England alone increases by over 2,000 per year, that membership having as one of its major hobbies the playing of mental games and the solving of mental puzzles. Similarly, the recent formation of the International Brain Club, with its emphasis on teaching mental skills and its establishment of official mental world records in each of the areas of "Mental Literacy".

This accelerating growth of interest in the Mental Arena has reached an explosion point. Local, national and international competitions proliferate; virtually all important newspapers and magazines carry articles, columns and feature sections on chess, bridge and brain-twisters. In recent years the "Tournament of the Mind" in *The Times* and the "Mastermind" program on BBC TV have attracted big followings. Hundreds, in some cases a thousand, or more competitors descend on towns and cities for Scrabble, Monopoly, Go, Chess, Bridge and other championships, and the demand for literature, clubs, playing venues and competitions increases steadily.

And now, for the first time, competition on the mental battlefield can be seen, instantaneously, by as many spectators as watch competitions in the physical battlefield. The barriers to large numbers of spectators watching mind sports events have largely been overcome by modern technology. David Levy's "Intelligent Chess" display system, which detects and instantly relays the moves as they are made on the board, has been in use in top class tournaments and World Championship matches since 1986. This technology will be extended for the Mind Sports Olympiad so that spectators can follow many of the events on television monitors. Computer, video and television screens make the "Mind Sports Spectacular" the next inevitable mega-event, with hundreds of millions of people around the world tuning in, and with commercial implications that will rival the 12 billion dollars generated by the 1990 soccer World Cup in Italy.

THE MIND SPORTS AND GAMES. Brain Club members are encouraged to become involved in the Mind Sports Olympiad as supporters and competitors, and are reminded that the mind sports involved are as follows:

Backgammon	Go
Biofeedback	Go-Molu
Bridge	IQ Competition
Chess	Mah Jongg
Chinese Chess	Memory Skills
Cluedo	Mental Calculations
Computer Programming	Monopoly
Creative Thinking Tests	Poker
Cribbage	Problem Solving
Crossword Puzzles	Renju
Diplomacy	Reversi (Othello)
Dominoes	Scrabble
Draughts 8 x 8	Shogi
Draughts 10 x 10	Skat
Fantasy and War Games	Spelling
General Knowledge	Trivial Pursuit
Gin Rummy	Vocabulary

Synapsia is gathering the names of Brain Club Members who wish to participate, and the areas in which they wish to compete. Please let us know of your participation and chosen areas as soon as possible! ●

For information contact Tony Buzan, BCM 1, Raymond Keene, OBE, BCM 275, and David Levy BCM 378.

WATCH OUT - MIND MAPS ARE ABOUT!

By Ron Philpott

Fluor Daniel Limited, one of the world's leading multi-national engineering consultancy firms, and an acknowledged leader in the field of personnel training and development, has caught the Mind Map bug! Ron Philpott, a senior manager with Fluor Daniel, reports:

"What is everybody up to?" "What are these spiky drawings?" "Mind Maps!" "What are they?!"

Confusion broke out at Fluor Daniel Limited when the "enlightened ones" started to apply their newly acquired Mind Map skills with gusto to various work applications. How did this "positive virus" break out? Who was responsible for it? In this case, the buck stops right at the top – Rick Dean himself (president of Fluor Daniel Limited (FDL)).

Whilst on a seminar in America, Rick was introduced to the Mind Mapping Technique. When he was transferred to EAME (Europe, Africa, Middle East) he sought out the originator and the result was the "Open Mind Seminars" recently held at Camberley, Manchester, Holland and Germany.

The seminars comprised three main sections: **Mind Mapping** – **Memory** – **Range Reading** involving 400 members of staff/wives/partners and lasted some 22 hours.

Mind Map pads, coloured pens, highlighters and three handsome manuals were provided to each participant, together with 3 coloured tennis balls. Tennis balls?! Yes, I'll explain later.

The seminar was based on 10 modules which involved videotapes of Tony Buzan teaching methods for improving mental performance. The FDL attendees were linked to the classroom by co-presenters who organised the associated workshops. We were fortunate to have as our main presenter Vanda North, (Brain Club Member and M.D. of Buzan Centres). She was assisted by Keith Gorman, James McNicoll and Ron Philpott in Camberley. For the Manchester event, Chris Coles replaced James, and other trainers in Holland and Germany.

It was educational to watch Vanda lead us through the Left/Right Brain Theory and Mind Mapping – she has so much vitality – and it's a bit like "After the Lord Mayor's Show" to follow!

Skills learned included Brain Functions, How to Learn, Recall during/after Learning, Memory Techniques and Range Reading.

Names/Faces, a problem for most of us, proved to be great fun and all were surprised to find that they had improved their capability considerably after applying the techniques.

Range Reading produced some amazing improvements in w.p.m., although some people questioned their ability to comprehend at these fast rates. This produced much positive debate, as did other segments of the seminar.

The Tennis Balls! Breaks are an essential part of improving recall and therefore, if we wish to improve our effectiveness, we should not lock ourselves in deep concentration for long periods without mini breaks. These breaks enhance our learning ability. Juggling is an excellent mini break stimulant.

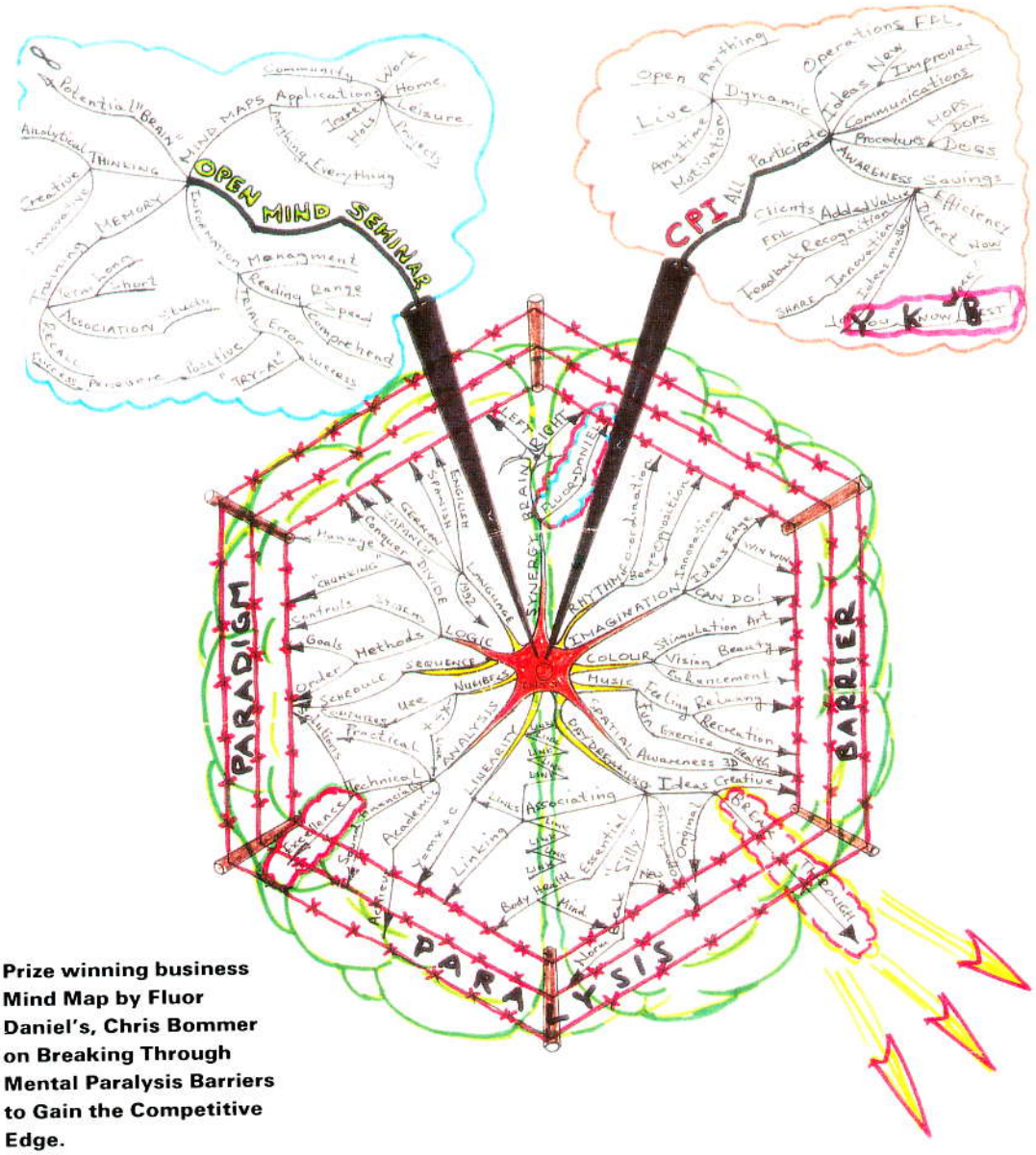
We also learnt that to fail is a natural part of learning and that we should share these failures instead of hiding them away. "How fascinating" should be our response!

A celebration meal was provided at the end of each seminar and the feedback from the course was one of unanimous success.

A competition for the best Mind Map was subsequently set. The level of entry was exceedingly good and Tony/Vanda judged the entries before deciding that Chris Bommer's entry was the winner. He received a set of "Family Genius" video tapes as a reward. Now other divisions are running competitions as well.

Mind Map Competition In their quest to provide Engineering Services of unmatched value, Fluor Daniel have developed a culture which is constantly striving to achieve excellence. It has created an environment in which change is encouraged, and Continuous Performance Improvement (CPI) is a common goal. Training modules such as the Open Mind Seminar are excellent stimulants to this end.

The winning Mind Map (MM) by Chris Bommer, a civil engineer, appeared at the outset to bend some of the MM rules but it was rich in imagination. The Paradigm Paralysis Barriers (PPB's) many of us have, evolve through our habits, rules and regulations practised over a long period of time. Although they



Prize winning business Mind Map by Fluor Daniel's, Chris Bommer on Breaking Through Mental Paralysis Barriers to Gain the Competitive Edge.

have held us in good stead, they also restrict our thinking to well trodden paths/processes. They are normally linear habits and can inhibit our focus and reception of new ideas.

Chris' Map (above) depicts the Left/Right Cortex hemisphere information processes, stimulated by the Open Mind and CPI ingredients. Chris has expanded and linked both hemispheres to generate innovation and creativity. The resultant product is to achieve a break through the Paralysis Barriers, create change and, hopefully, gain an improved competitive edge.

Other entrants included Mind Maps of Company Induction Programme; BSS.5950 – a new British Standard on structural engineering calculations – and How to Make a Dress!

Applications The MM "positive virus" surfaced in various disguises. Amongst them were:

- Use for planning presentations – in-house and for clients.
- Use for overall planning of training programmes and individual Mind Maps for each subject on a recent 4 week Electrical and Control Systems Design training programme for new graduates.
- Several attendees readily use MMs for note taking at meetings.
- Use of defining project scope.
- Used for problem solving and goal setting.

Follow Up A follow up meeting to the Open Mind Seminar resulted in many participants expressing a desire to expand their newly acquired interest. To encourage this, a weekly lunchtime meeting will be held during which repeat tapes will be shown/ discussed and further applications shared. **Watch out! Mind Maps are about!** ●

LETTERS

Memory Commandoed As a recently recruited member of the Brain Club, I wanted to begin by working on a modified version of the Intellectual Commando Unit Concept, one in which members do not actually require to see each other. I have now brought together a group of Brain Club Members, who are interested in covering Master Your Memory. Our main aim is to "peg" the chapters onto the Self Enhancing Memory Matrix.

We each assign ourself to a particular chapter, create the memory image and/or descriptions and then write them down. These are then posted and distributed to other members in our circle.

We are spread all over the country, and so therefore, most of our activity is done by letter or telephone. I think the advantage of this ring of enthusiasts, is that we are covering the contents of "MYM" about ten times faster than one person grinding through it him/herself. So far I have found it great fun, and also a good way of making contact with other members.

If anybody is interested in joining our group, don't hesitate to contact me. I would be happy to send them a copy of the work I or anybody else has done.

ANDREW RAHMAN
WARRINGTON BCM 356

PS. Oh yes! Are you interested in joining Miss Vanda North?

Editorial Reply: Yes! Thank you, what a terrific idea, this is exactly how we saw The Brain Club working. Who has done which sections so far? Keep us informed and we will publish them in Synapsia!

Mind Map Honours I cannot begin to express how much pleasure and fun I have derived from practicing the techniques of Mind Maps and memory techniques. I am currently reading for an Honours Degree and busily turning all material into map form!

Has any research been carried out on the effectiveness of other techniques for stimulating the brain? I am thinking particularly of (a) self-hypnosis tapes; (b) 'New Age' music designed (so the literature says) to stimulate alpha, beta and theta brain waves; and (c) programmes of exercises for the right brain.

If I understand your argument correctly then surely none of the above are of any great use? The brain will be exercised as a consequence of Mind Maps etc.

Once again, many thanks for all the benefit I have derived from reading and listening to your work.

SUSAN BOOTH
CHEADLE HULME

Speed Reading Challenge As a Member of the Brain Club I was delighted to receive Vol. 1, No. 3 issue of **Synapsia** recently. I am surprised **Synapsia** shows the world record for reading speed at 3,850 w.p.m. as there are people in Australia who claim to read well over 20,000 w.p.m. How is this tested? My company has a speed reading course where we have recorded speeds at over 4,000 w.p.m. We use a computer program to test the speeds and comprehension so that the results are as objective as possible.

G. W. BUCKLEY
BALMAIN, NSW, AUSTRALIA
BCM 85

Ed. The answer is imminent! In 1992, in Tampa Bay, Florida, the first World Speed Reading Championships will be held. In the next issue of Synapsia **we will provide a full report on these forthcoming World Championships. We hope to see you and a large Australian contingent of Brain Club Members there!**

Question Time When planning a long term, complex project with a Mind Map, how do other Brain Club members handle changes without redoing the whole Mind Map?

GRANT DAVIDSON
CALIFORNIA
BCM 117

Pursuing Brain Awareness *Reasons for Joining* I joined The Brain Club in order to keep up to date with research on learning and the brain, to learn new mental skills, to develop my brain skills and to get control of my life. I also want to help my family develop their brain skills and I shall encourage my friends to take an interest.

I am pleased that the school where my daughter attends seems to be aware of Mind Mapping and the need to teach both sides of the brain. I have checked my daughter's IQ and she is above average.

About Me I have 7 'O' levels, 3 'A' levels, a BSc degree in Chemical Engineering, Chartered Accountant qualification and I am a member of Mensa. I am a corporation tax specialist working for a top ten firm of Accountants.

Life begins at 40. I am just beginning to get control over my life. It will take at least another year to finish decorating the house after three years of builders' chaos to extend and alter the place.

Events Leading up to Joining The Brain Club **1972** Read "Speed Reading" and "Speed Memory"; **1980** Joined Mensa; **1988** Read "Freedom from Clutter" by Don Aslett (published by Angus & Robertson Publishers ISBN 0207 153167) and "Mind Power" by Dr. Vernon Coleman (Guild Publishsing); **1989** Went on a 2 day time management course organised by my employer. Worked on improving my time management by listing, planning and prioritising tasks; **1990** Read "Use Your Head" and "The Brain Users Guide". Listened to the "Supercreativity" cassette. Attended 1 day IMP course in London (amazed that I was the only one out of eleven who knew the names and positions of the planets). Listened to "Make the Most of Your Mind" and "Learning and Memory" cassettes. Joined the Brain Club.

Nobel Questions I am interested in the question about internally projected images and perhaps ways of improving that skill. My initial reaction is that imagining a projected image is misleading. You can "see" a projected image because you imagined the images projected and not just existing. It is also possible to think of an image while looking at something else, and to imagine a sound while listening to something else. That suggests that the internal image system is independent of the eyes and other senses. I look forward to learning more on this question.

ROBERT ALLEN
NORTHAMPSON
BCM 315

World Memory Championship Challenge Re the first World Memory Championships in Italy in August, I would be interested in setting a new World Record in memorising a shuffled pack of cards in the quickest time possible. This involves being shown each card (from a shuffled pack of 52) only once and then calling them all back in the same sequence from memory.

I reckon I am capable of memorising the pack in around 2½ minutes (my personal record in practice is 2 minutes 14 seconds).

I would also like to start off a British record of the memorisation of telephone numbers.

The current World Record, as you know, is around 15,000 telephone numbers, by a female telephonist in China. I think by the end of August I will know around 5,000 Middlesbrough telephone numbers (6 digits in each number). I believe I could have the World Record next year, sometime.

I can also give demonstrations of my memory of Pi decimals (I had the World Record in 1979 for memorising Pi to 20,013 places). I still know the first 10,000, which I have put on a long roll, many yards long, as you can imagine. I can identify any number on this roll (eg. you might ask me the 7,486th digit and I could tell you in seconds). Also, I am able to recite any series of numbers on the tape forwards or backwards.

The numbers on the roll are set out in groups of 50 digits, making it easier for anyone to test and check my memorisation.

Of the memory categories mentioned in the Autumn issue of **Synapsia**, I think possibly I might take part in the challenges of memorising 300 words in 6 minutes and the 300-digit-long number in 6 minutes.

I am in the process of contacting the media up here in the north-east regarding the World Memory Championships. Hopefully, some other 'memory men' will see the publicity and be interested in taking part. I will send you any newspaper publicity from this area.

CREIGHTON CARVELLO
MIDDLESBROUGH,
CLEVELAND
BCM 371

Deliberate Mistakes?! In the most recent edition of Synapsia I immediately recognised your deliberate mistake.

David Levy, according to your editorial, made a bet in 1986 for £1,250 with four professors that no computer would beat him within ten years.

It would be somewhat premature, I believe, for Mr Levy to claim a win therefore before 1996!... That is of course unless he really made the bet in 1968!

BRIAN LEE
HENLEY-ON-THAMES
BCM (F3)

BODY and SOUL

Body and Soul the beautiful cover of *Synapsia*, The Brain Club Journal, which was featured and explained in *Synapsia* Volume 1 Number 3, Summer 1990, is available to Brain Club Members at a special discounted price of £23.00 (usually £28.75).

Complete the address label below, and send with your cheque or Visa/Mastercard number to The Buzan Centre, Suites 2/3, 37 Waterloo Road, Winton, Bournemouth, Dorset. BH9 1BD.

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BOOK REVIEW COLUMN

UTOPIAN

Walden Two
B.F. Skinner
Macmillan Books

Can Men live in freedom and in peace? Yes, if we can build a social structure which will satisfy the needs of everyone and in which everyone will want to observe the code. Such is the premise of *Walden Two,* the classic fictional account of a Utopian society by the leading behavorial psychologist of this century, B.F. Skinner.

Written in narative it tells the story of two men who visit a small Utopian society physically like a mix of Thoreau's original Walden and a big summer hotel. The society provides a place where genius can express itself, art and music are nurtured, responsibility for the well-being of the community is shared, and in which education is a continuous, lifelong process. Professor Burris, who founded and leads the community, tells the story of how the society works and came to be through his pithy observations throughout the book. Indeed, much of the thought-provoking tension comes through his conversations with Castle, the democratically minded observer who constantly questions this social structure.

Professor Burris believes that we as individuals are in a pitched battle with society and therefore decided to create one of his own in which positive reinforcement is the basic premise. When asked why he was doing this and what he thought his chances for success were, he said: "You may grow tired of hearing this, but I must say it again and again. A golden Age, whether of art or music or science or peace or plenty is out of reach of our Economic and Governmental techniques. Something may be done by accident as it has from time to time in the past, but not by deliberate attempt. At this very moment enormous numbers of intelligent men and women of good will are trying to build a better world. But problems are born faster than they can be solved. Our Civilization is running away like a frightened horse, her flanks flashing with sweat, her nostrils breathing a frosty mist; and as she runs, her speed and her panic increase together. As for your politicians, your professors, your writers – let them wave their arms and shout as loudly as they will. They can't bring the frantic beast under control. " What do you do with the runaway?" said Castle. "Let her run till she drops from exhaustion" said Frazier flatly. "Meantime let us see what we can do with her lovely colt."

Skinner pictures a society in which work is interesting; that is independent and synergetic; in which everyone works toward their highest potential; where people do good to those who despitefully use them; where behavioural processes lead the individual to design his or her own "good" conduct. Children are lovingly cared for, the community is industrious and harmonious, and the "Government" is based on unbiased information from the science of Human Behaviour.

This outline of a modern Utopia has been a centre of raging controversy ever since it's publication in 1948. Indeed, B.F. Skinner and his work has been at that same center for half a century. Reading the book is much the same way: there are ideas to delight and amuse as well as ones to annoy and disturb. It is a vehicle to make you think. It has been called everything from "A brisk and thoughtful foray in search of peace, mind and security" to "A slur upon a name, a corruption of an impulse" to "alluring in a sinister way, and appalling too". There are many gems of knowledge contained within these pages, and they are as wide ranging and original as Skinner himself.

Why does Man continue to envision Utopian societies? According to Skinner, for the most basic and human of reasons. To build a world of choice without changing others, and to offer a full and happy life to those who will go and do likewise. May we all do as well for the planet as Skinner envisions here. He will be missed. ●

PAUL H. WILCOX

BRAIN CLUB NEWS

FROM THE DESK OF THE BRAIN CLUB'S NEW CHIEF ADMINISTRATOR AND ADVISORY PSYCHOLOGIST (CAAP)

HI, this is Susy writing. That's Susy Churchill, Brain Club Chief Administrator and Advisory Psychologist (CAAP for short).

For those who like personal details: I took a Degree in Psychology at the University of Reading from 1971-1974; did a teacher training course from 1975-6; have trained in counselling, psychological testing and as a presenter of Mental Literacy and Mind Mapping techniques.

I've worked in industry, education and the U.K. National Health Service, and currently divide my time between working here, as a research psychologist, as a trainer and as a counsellor.

I am married to Victor, a lovely man who works in computer software design, and I have three children, aged 12, 9 and 6. The hobbies I **regularly** take time for are: gardening; reading (particularly SF/Fantasy); walking with our dog; and cookery.

I have been reading your letters, and the comments on your membership renewal forms with great interest. We've been looking at how The Brain Club is going to grow and develop, and here are a few of my own ideas:

1. REGIONS I'd like to set up U.K. and international regional co-ordinators. Their job would be to:

a) contact new Brain Club Members in their area, to welcome them.

b) gather information about local/regional organisations likely to be of interest to Brain Club Members.

c) plan and organise an annual Regional Study Day/Conference, which I would be delighted to attend.

2. ASSOCIATIONS We're planning to establish formal and informal links with organisations who share some of our aims and goals. MENCAP, Headway, the British Dyslexia Foundation, and the Centre for Conductive Education are some we've identified.

3. NETWORK Setting up the computer network has taken a lot longer than expected, but negotiations are in progress and we will keep you informed.

4. ACTIVITIES As a charity, we have to hold an **AGM** every year. No groans! Our AGMs will be FUN, an opportunity to enjoy using our brains, and a celebration. Currently planned for Guy Fawkes night, in London.

Regional Study Days/Conferences: these will offer an opportunity to demonstrate your skill levels and receive certificates; assess your current mental performance with psychological tests: IQ, thinking styles, etc.; and enjoy the mental and physical stimulation of a Study Day or Conference.

PLEASE let me have your responses to these ideas. I look forward to hearing from you all.

SUSY CHURCHILL
BCM 288

LONDON CELL, U.K. London Cell Members have been creating great projects on their own, and are looking forward to getting back together in 1991 to catch up on all the activities.

If you live in London, or would like to visit the London Cell, meetings, starting at 7.30 p.m., have been arranged in the Civic Offices, St. Nicholas Way, Sutton, on the following dates:

23 February:	Topic:	Motivation to Learn
23 March:	Topic:	Memoriad Preparation
27 April:	Topic:	Taking each of the championship
25 May:		categories of the Memoriad as
22 June:		shown in **Synapsia** Vol. 1 No. 4,
		and practicing.

The co-editor would like to take this opportunity to thank Jane Mitchell and John Needham for a year of great service in co-ordinating the London Cell of the Club. However, Jane says that she needs to pass on the reins, as she concentrates on her work with Learning 'Differences'.

WELSH CELL Single Cell Member, Prem, (who often travels all the way to London to meet with the Cell there) has offered to organise a summer Brain Club Conference in Wales on the 20-21 July 1991.

BRITISH COLUMBIA CELL, CANADA. BC-BC enjoyed seeing how we saw ourselves last year. There is quite a progression in the approach to the club today. Monthly meetings have moved to a hotel board room which makes the travel time more equitable for everyone. We have a firmer format which consists of Business, Individual Goals, 'Show and Tell' and Group Study. We are now moving the Group Study section to the first third of the night to give it the greatest emphasis. At the moment we are concentrating on Memory for the group work. Last Friday night and all day Saturday, six of us retreated to Corky's cabin for our first all day study session. The focus was on camaraderie, drawing, Mind Map review, juggling, brisk walking and swimming. We accomplished most of what we set out to do and everyone present rated the time together as a real treat and a success. Sitting by Corky's fireplace as we chatted, with a fresh mug of coffee in hand brought Gibran's words to mind: 'Your friend . . . . . is your board and your fireside'.

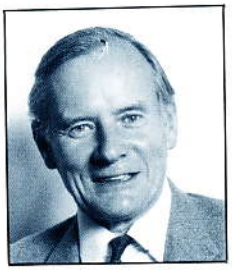
CANTERBURY UNIVERSITY CELL, U.K. I set up the Canterbury cell using the same format as the London one. The first meeting was held on Saturday, 20 October, in Seminar Room 11 of Rutherford College's extension at the University of Kent at Canterbury. Since then there have been meetings on the first Saturday of each month. At present meetings last from 2.00 until 5.00 o'clock, with gradually more people becoming interested, both international members and students who are discovering Tony Buzan's work.

In 1991 we will start off by working on our Speed Reading and will be gradually building towards a SEM^3. We will also be looking into the Mind Mapping of subjects, such as computer science, that involve things like mathematics, etc. We also hope to be able to make a connection with the axon of the London Cell and hopefully vice versa.

PALM BEACH CELL, FLORIDA, U.S.A. Members of the Futures Brain Club of Palm Beach are continuing to work on a major project that will combine The Brain Club principles of Learning to Learn with a community sponsored Life Long Learning project. It is hoped to create a model that can be replicated with ease and effectiveness.

The Members are also continuing to study in small groups or individually to raise their own skills. The Members have backgrounds in education, law, computers, psychology, medicine, architecture and all are committed to positively affecting our future.

BOURNEMOUTH CELL, U.K. Cell Members have spun off on their own orbits for a while, however, with the new Chief Administrator of The Brain Club in Bournemouth we know we'll be off to a great 1991! ●



The occasion was a lecture in Mexico City to Mexican pediatricians, medical and health personnel with the problem of instant translation and perhaps not too much knowledge of biochemistry on the part of those who were supposed to be listening. In working out what could be said with few words about brain development I was wrestling with the section that attempts to convey the oustanding complexity of the brain, its phenomenal investment in lipid membranes which handle the continuous traffic of information.

The brain is not unlike a computer in some respects so it is probable that the number of cells (chips) and the synaptic connections between them (bus systems) determine its capacity to function.

The human brain, I am told, has about 10 to the power of 12 cells which is pretty meaningless to the average person or pediatrician who is not mathematically minded. A number on the blackboard with twelve noughts in it does not look impressive unless you have a feel for numbers. After all what difference does another nought make?

"I do not know if this was a useful way of thinking about the brain but, if it is like a computer, it must have a staggering potential."

In the usual eureka way that things happen whilst brushing one's teeth, my own brain cells having (unknown to me) been working on the problem came up with the answer. Relate the number of cells as a multiple of a number with which people may have some familiarity. Thus the human brain has a cell population of five thousand times the population of the United States of America. Furthermore each of the five thousand times twenty million people have telephone contacts (synaptic junctions) with about six thousand other people and all their information. Each brain cell has about six thousand contacts or more with other cells.

I do not know if this was a useful way of thinking about the brain but, if it is like a computer, it must have a staggering potential. ●

Professor Michael Crawford BCM 257

WORLD CHESS CHAMPIONSHIP

– THE FINAL RESULTS

By Raymond Keene, OBE,
BMC 275 for Synapsia

Garry Kasparov, the defending world chess champion, has finally imposed his dominance on Anatoly Karpov after a duel that has spanned five encounters and half a decade.

Their first match began in Moscow in the winter of 1984 and was terminated on February 15 after 48 games with no final result. Kasparov, who had emerged from earlier doldrums, had won two games in a row and was predictably not amused by the decision.

His revenge came at Moscow in 1985 when, at the age of 22, he beat Karpov to become the youngest world champion. In return matches held in London and Leningrad in 1986 and Seville in 1987, Kasparov fought off Karpov but only by the narrowest of margins.

In Lyon, Kasparov's fiery genius has now produced an incontrovertible victory, being two points ahead with two games remaining and having already secured the 12 points needed for retention of the world championship. Kasparov, aged 27, from Baku, in Azerbaijan, must now be regarded as the greatest player in chess history.

The quality of chess played in this match has been equal if not superior to that in any former world championship match. Such chess summits are always liable to produce errors. Those committed by both players in this competition, however, were brought about by the supreme tension of the occasion and the immense financial rewards at stake.

Although the match fell into two quite distinct geographical halves, the waves of fortune throughout this lengthy contest resulted in a considerably greater number of clearly identifiable segments.

From games 1 to 6 in New York it appeared that Kasparov fully intended to overwhelm his opponent. He bravely defended with the King's Indian in game 1. He ripped Karpov apart with a violent Ruy Lopez in game 2, which epitomised his early successes. Here Kasparov made clear that he believed Karpov's weak point to be his Black defence in the Ruy Lopez opening which, although known not to be one of his favourites, he used repeatedly during the match.

The key moment of the second game came when Kasparov sacrificed his Bishop on move 25 with the move Bxh6 (*see diagram 1*). This move started a mighty offensive that swept Karpov away. Few would predicted at this stage that Karpov could survive this onslaught and the ferocity of the young champion's new ideas.

He even sacrificed his Queen in the opening as Black in game 3! Karpov's fine defensive sense nearly toppled Kasparov's over-optimistic attack in game 4 but, given the extreme complexity of the play and the fact that this game could have gone either way, the eventual draw was not a totally unfair outcome. In game 5 Karpov could make nothing of the White pieces while for game 6 Kasparov's Ruy Lopez again brought Karpov to the brink of ruin, though Karpov's eel-like defence once again resisted being pushed over the edge. Thus, the first phase of the match ended with a slight success to the defending champion, but Kasparov had probably hoped for more and might well have been suffering from disappointment.

Over the next phase of six games, roles were reversed and Kasparov seemed unrecognisable. Indeed, this section of the match witnessed some of the most feeble play ever seen in a world championship, with both players' spirits seemingly weighed down and unable to develop any kind of fantasy. In game 7 Kasparov lost like a child, having committed a blunder known to be terminal ever since the Fischer-Spassky match of 1972. For game 8 Kasparov completely mishandled a winning attack to find himself in a lost endgame. From this he was only saved by Karpov's addiction to time trouble, which proved the former champion's bugbear in so many games from his match. For game 9 Karpov returned the compliment of game 7 by blundering away a critical Pawn in an advantageous position while in game 10 Kasparov could make absolutely no headway against Karpov's one-off use of the Petroff Defence. It is a mystery, given his success in this game and the difficulties he generally experienced against 1.e4, that Karpov did not resort to the Petroff more frequently. Game 11 was an elegant draw, well played by both sides, while game 12 virtually repeated the pattern of game 8 when a mishandled offensive by Kasparov almost left him with an inferior endgame. Thus, at the mid-way stage, the score was level, Kasparov's recent performance had been lacklustre and many experts were predicting that Karpov was about to regain the world title.

The two players were in the middle of a record run of draws, which must have been galling to Kasparov,

who was thirsting to demolish his opponent after the close calls of previous matches.

On transferring to Lyon, a sudden transformation affected the champion's play. True, he could not avoid further draws from games 13 to 15 but in game 14 he had introduced a new element by exhuming that nearly forgotten 19th Century weapon, the Scotch. If anything, Karpov had the better of these three draws but at least decisive results were in the air.

These two Grandmasters are Titans in the chess world. They stand head and shoulders above their

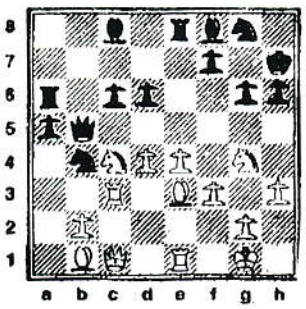


DIAGRAM 1

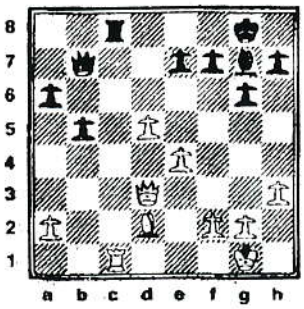


DIAGRAM 2

rivals. No other Grandmaster can survive at their level, apart perhaps from the reclusive Bobby Fischer who has not moved a single Pawn since 1972.

Kasparov, however, has the advantage of youth and has won four of his five world championship matches. He is still two years younger than Fischer was when he became world champion, and is 12 years younger than Karpov.

The final phase of the match was ushered in with game 16, a back-breaking marathon and another Scotch, in which Karpov was ground into the dust after 102 moves. Karpov struck back in the very next game.

In game 17 (*see diagram 2*) with Karpov playing White, Karpov, after move 26 by playing Rc6, ensured penetration of Kasparov's camp. A few moves later Karpov reduced the Black position to a shambles and forced Kasparov's resignation. **AFTER 17 GAMES KARPOV WAS STILL EVEN!**

It was at this stage that the world champion started to take control. From this point Kasparov broke through again and again with the Ruy Lopez in games 18 and 20 to crush Karpov's resistance.

In game 20 (*see diagram 3*) Kasparov made a dramatic breakthrough culminating in the brilliant sacrifice of his Queen to shatter Karpov's fortifications. The attack in this game was possibly the most brilliant ever played between Karpov and Kasparov. The diagram shows the position after Kasparov, before move 34, played Qxh6+. This Queen sacrifice, rare at such a high level of chess, finally broke Karpov's

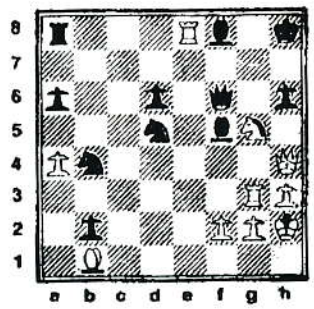


DIAGRAM 3

resistance.

The challenger had now gone two points down and although he strained every nerve in games 21 and 22 he could do no more than draw. The draw in game 22 gave Kasparov the title.

Furthermore Karpov, although extremely talented as an intuitive player, has never quite adjusted to the modern era of computer information, preferring to play on his own instincts. Kasparov, however, is a computer addict whose headquarters are stacked with computer database chess moves.

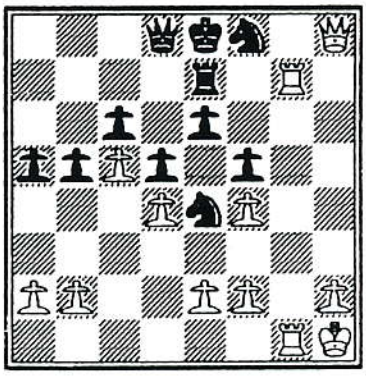
Kasparov has not just accumulated such information, he also knows how to retrieve it and utilise it to great effect. He also has greater-than-average powers of memory.

THE overall standard of this match has been outstanding, probably the best of the five matches they have contested. Kasparov certainly thought so, telling me that Karpov was much better prepared than in 1985 and that Kasparov himself did not suffer the external distractions which he claimed affected his play in 1986. I fully agree with this. The fierce clash of ideas has made it their finest ever battle. Kasparov has won, but Karpov went down with all guns blazing to an honourable defeat. I confidently expect him to be the challenger again in 1993. ●

CHECK MATE

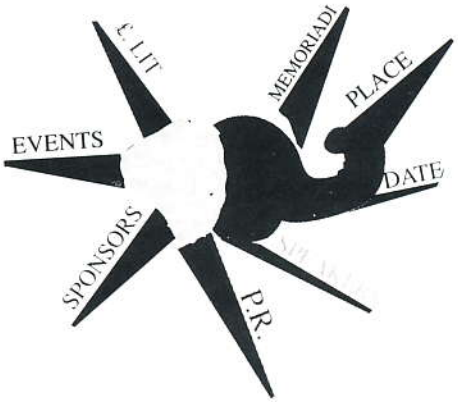
This position is taken from the game White - Levitt Black - Tisdall Watson, Farley & Williams/City Of London Corporation 1990

How can White achieve a winning material advantage?



The solution to the above problem, and that published in our last issue will be found on page 35.

MEMORIADI '91



Since the Autumn 1990 issue of **Synapsia**, the preparations and entries for the Memoriad 1991 – The First World Memory Championships – have progressed apace. **Synapsia** keeps you abreast of developments.

At the date of going to press, already over 100 applications have been received for Memoriad 1991, and major prizes are now being offered for the overall championships and for individual accomplishments.

THE PRIZES. The prizes being offered already include:

1. $10,000 for the overall champion.
2. A seven day holiday for two in the Maldive Islands tropical paradise.
3. Membership of the Brain Club.
4. Special prizes from **Encyclopaedia Britannica, 3 EB Atlases, 1 Webster Dictionary – 3 Vols., 1 EB Replica – 3 Vols., 5 Dictionaries "Mi diverto con le parole" ("My Fun with Words") – 2 Vols.**
5. A complete set of Shakespeare's work offered by Viking Penguin Publishers.
6. Signed editions of Raymond Keene's major works on chess.
7. Signed editions of Tony Buzan's books, forming an introduction to his growing encyclopaedia on the use of the brain.
8. Akila Leadership Assessment Training seminars lasting seven days. Location: Italy.
9. A feature article in **Synapsia**.

Synapsia encourages Brain Club Members and **Synapsia** readers to add their own prizes and sponsorships.

THE EVENTS. To summarise the events outlined in the previous issue of **Synapsia**:

1. World Memory – the task: memorise 300 random words in correct order within ten minutes.
2. Number Memory – the task: a) memorise a 300 digit long number, in order, within ten minutes.
   b) memorise as many numbers as possible at one per second.
3. Names and Faces Memory – the task: memorise 200 'new multi-national' people, met at the rate of one every three seconds.
4. Language Memory – the task: memorise the most new words from seven different languages within half an hour.
5. Magazine Memory – the task: read and memorise as much of a magazine as possible in half an hour.
6. New World Records Division. A division established to encourage masters of memory from around the world to establish world memory records in any, or all, areas. The function of the new world records division is to establish the **first world bench marks** in each of the major memory skill areas, much as the first physical Olympic games established Olympic records in each of the major physical arenas.

SPECIAL GUEST SPEAKERS The Memoriad 1991 has already attracted a host of leading figures and 'Brain Stars' from the worlds of the brain and memory:

Creighton Carvello: World record holder in six-pack-card and speed-card memorisation, and English national record holder for the memorisation of the number of digits of Pi. Internationally renowned 'memory performer' on radio and television. Currently working on breaking the world record for the memorisation of 'phone numbers.

David Levy: Renowned as the first human to challenge machine intelligence to beat him at chess and consistently win over a period of 20 years. Author of 30 books on chess, thinking and memory – President of the International Computer Chess Association.

Frank Felberbaum: Educational psychologist, Harvard graduate, and protégé of the late great Dr. Bruno Furst. Frank jointly hosted national TV programmes with Dr. Furst, and is renowned for amazing audiences with his ability to remember

vast amounts of sports statistics covering a 25 year period. International lecturer on memory in over 40 countries worldwide, and inventor of a new three-dimensional memory system.

Giancarlo Nacinelli: Describes himself as a dreamer! Creator and founder of Memotec, the Italian memory training seminar organisation. Giancarlo has trained over 80,000 students in memory and learning since 1980 in Italy alone. Internationally renowned as a teacher of the teachers of memory.

Raymond Keene, OBE: International Chess Grandmaster. Author of 50 books on chess, thinking and memory, including **The Warriors of the Mind**. One of television's 'intellectual stars'. Co-founder of the World Mind Sports Olympiad.

Robert (Bob) Pike: Known throughout America as 'the trainer of trainers'. Author of many books, papers and articles on learning and memory. Has told hundreds of thousands of students to improve their memory performances.

Tony Buzan: Inventor of Mind Mapping and the Mind Mapping memory technique. Inventor of the Self Enhancing Master Memory Matrix (SEM^3). Author of 10 books on the brain and memory. Olympic advisor and holder of the world record for the highest Creativity IQ.

COME AND JOIN US IN ROMA! The first World Memory Championships are being held at the Roma Cavalieri Hilton on Saturday, 31 August 1991.

The Championships will include the competitions themselves, as well as lectures from the world's leading authorities and performers in the realm of memory. In addition, there will be various social and spontaneous events for all concerned.

Please come and join us! All Brain Club Members interested are encouraged to write to the Editor of **Synapsia** with their entry areas, ideas, suggestions, and any other offers of help.

Be prepared for a totally **memorable** occasion and event! ●

Check Mate solutions:

The solution to the problem in the last issue of Synapsia:

1 Qg3! is unanswerable, e.g. 1 ... Qxg3 2 Nxe7+Kh8 3 hxg3 winning a piece.

And the solution to this quarter's problem:

1 Qxf8+! Kxf8 2 Rg8+ and 3 Rxd8.

POETRY CORNER

uluru

alice springs, october 1980

you mother, give only a glimpse of
round shoulders
as we angle, oblique, towards you

then you disappear
behind sand dunes and desert oak

this time your massive head
stretched down
from your body eyes us

convolutions of flesh rock where
in each seam water flowed through
now and then that time you were
born

from the sea-bed you were grunted
up
with two companions, guardians of
the
lines of force
hollows mark your passage

red, red, and orange contra-blue
mist, soft veils, translucent pink,
gothic fluted, bounce light through
vaulted shafts
violet

cells, membranes, nerves of stone
monster scales sheering away
cracks blistered soft underbelly they
sit in

and gnaw.

Lorraine K. Kuner
BCM 49

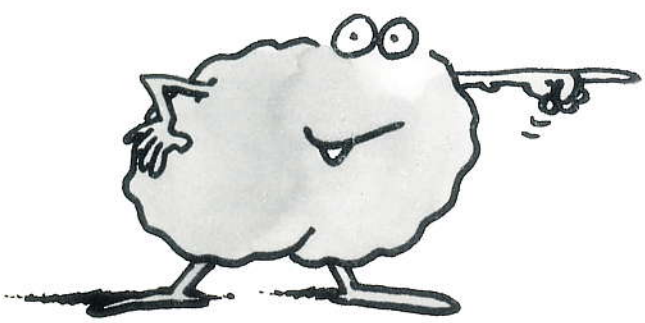
Note: Uluru is the Aboriginal name for Ayres Rock, their sacred place that sits in the middle of Australia and which is known as the red heart of Australia. It is known for the dramatic way in which it changes colour in response to the atmosphere, for the remarkable shapes etched in it by the wind and rivulets that flow down it in rainstorms, and for the gigantic image of a brain on one of its sides.

BRAIN CLUB

The Brain Club has now established joining fees, renewal fees and lifetime membership fees for individuals, families, schools, universities and companies. We especially need lifetime and organisation memberships, and encourage all current Members to bring more in!

	£	$
INDIVIDUAL		
Initial Joining Fee:	15.00	30.00
Annual renewal:	30.00	60.00
LIFETIME MEMBERSHIP		
Includes Initial Joining Fee and annual renewals in perpetuity:	1,000.00	2,000.00
FAMILY		
Initial Joining Fee for immediate family (parents and children):	15.00	30.00
Annual renewal per family:	30.00	60.00
Family receives one: Manifesto, membership list, **Synapsia** subscription. All Members are eligible to attend all Brain Club functions and to receive Member discounts		
SCHOOL		
Initial Joining Fee using the name of the school:	100.00	200.00
Annual renewal (available to the school, any student, teacher or administrator)	15.00	30.00
UNIVERSITY		
Initial Joining Fee:	500.00	1,000.00
Annual renewal:	20.00	40.00
COMPANY		
Initial Joining Fee under company name:	1,000.00	2,000.00
Annual renewal computed per person on a slide scale as follows:		
10 - 100	25.00	50.00
101 - 500	23.00	46.00
501 - 1000	21.00	42.00
1001 - 2000	19.00	38.00
2001 - 5000	17.00	34.00
5001 - 10,000	15.00	30.00
10,000+	12.00	24.00

Each Member receives full Membership benefits: Manifesto, Membership list, Membership card, year's subscription to **Synapsia**, sent to the Company. Members may attend functions and receive discounts.



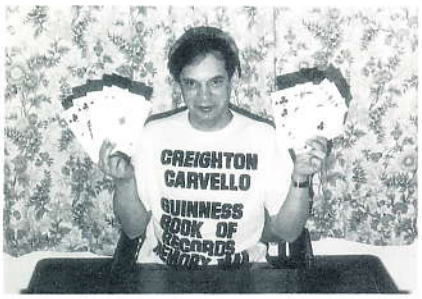
In the Autumn issue of **Synapsia** we focussed on the top chess players in the world, as well as the top IQs of all time. The Brain Club is interested in sponsoring a new wave or research into historical IQs, and looks forward to readers' suggestions, proposed studies and research, and sponsorship! In this issue we focus on memory, and introduce the concept of national as well as world mental records.

WORLD MEMORY RECORDS

Card Memory:

A. Memorisation of one pack of cards at speed. The world record holder is:

Brain Club Member Creighton Carvello who memorised one pack of cards at speed with only one error in 2 minutes 59 seconds.



This record was established on the 8 October 1987 on BBC TV's Record Breakers programme.

B. Six packs

Memorisation of six shuffled packs of cards – seeing each card only once – each pack shuffled separately. The world champion is:

Brain Club Member Creighton Carvello who memorised six shuffled packs of cards with four card errors.

This record was established on the 21 March 1985 at the new Marske Institute Club in Cleveland, Ohio, USA.

C. Memorisation of six packs of cards **all shuffled together** – seeing each card only once. The world champion is:

Brain Club Member Creighton Carvello who memorised all six packs of cards with only 24 card errors.

This record was established on the 7 March 1985 in Japan, live on Fuji TV.

D. Card memory with 30 packs shuffled together, no time limit. The world record holder is:

George Uhrin, Houston, Texas, USA.

Telephone Numbers

The world record holder is:

Gon Yang-ling who memorised just over 15,000 Chinese telephone numbers.

Song Memorisation

The world record holder is:

Barbara 'Squeak' Moore, who performed 1,852 (one thousand eight hundred and fifty-two) songs from memory in Pennsylvania, USA, in 1988.

Memorisation of PI

In the last issue we reported that Rajan Mahadevan was the world record holder at 31,811 (thirty-one thousand eight hundred and eleven) digits of Pi. His world record has recently been broken and the new record holder is:

Hideaki Tomoyori of Japan, who has just memorised 40,000 (forty thousand) digits of Pi.

National Records

The national record in England for the memorisation of Pi is held by:

Brain Club Member Creighton Carvello with 20,013 (twenty thousand and thirteen) digits of Pi.

This record was established on the 27 June 1980.

ART

Fastest Artist in the World

Ripleys (Believe It Or Not) Museum Display contains 'fast' paintings, and video showings of how they were created as **recognisable landscapes**. The world record holder is:

Conni Gordon in less than one minute**!**

Most People Taught Art in the World

This record is held by the person who has been proved to have taught more people to create art (paintings) than anyone else in the world. The world record holder is:

Conni Gordon of Miami Beach, Florida – over sixteen million **16,000,000 people taught in 40 years.**

For other Mental World Records see back issues of Synapsia.

The world record holder for the top IQ of all time is:

The writer and philosopher Goethe with an estimated IQ rating of 210.

TURKEY

Yacht Cruise · Bodrum · Turkey
21st to 27th September 1991

Seven day cruise around the Aegean coast of Turkey on a luxury, fully crewed sailing yacht. Accommodation is in double cabins with private shower/we (ask if you want a single). The price includes all food, fuel, harbour expenses in Turkish waters, windsurfers and entertainment. Joining us will be world experts in many areas and there will be many surprises.

TOTAL COST PER PERSON £525.00

Flights to ***Istanbul/Izmir/Dalaman*** can be arranged at extra cost through PJR Incentives.
Please arrange your own travel insurance.

BOOKING FORM

THE 1991 BRAIN CLUB UNIVERSITY HOLIDAY
Yacht Cruise · Bodrum · Turkey 21st to 27th September 1991

Please reserve ..... place/s

Names ..... Share cabin with .....

....

....

....

Address for correspondence .....

.....

Telephone number .....

Please advise your flight details
if you wish us to arrange transfers
(at extra cost).

Date _____

From _____
To _____ Outbound _____
From _____
To _____ Return _____

I enclose a non returnable deposit of £225.00 per person and understand the balance is to be paid by 21 July 1991.

All cheques to be made payable to PJR Incentives and payment made in £ sterling.

Signed _____ Date _____

Send to:
PJR Incentives
16 Temple Mill Island
Bisham, Marlow
Bucks SL7 1SG
England
Fax: 0628 826208 Tel: 0491 578007

THE BRAIN CLUB