

THE EAST INDIA COMPANY



© 1997 BY THE EAST INDIA COMPANY

SCIENCE FICTION

MONTHLY

INSIDE:

First Episode of 'The Size of Things To Come' our full-colour comic strip

Fiction from
John W Campbell
Ian Watson

SF on TV- What came before Star Trek?

Plus: Film Review of Dark Star







Executive Editor

Pat Hensley

Editor

John Davis

Art Director

Ced Smith

Art Editor

Michael Coburn

Designers

Stephen Knowlton

Susan Westhead

Circulation Manager

Ray Helen

ADVERTISING

For all space orders and sales

enquiries, contact

Tim Boydell or Garry Walker-Dendle,

SOCIO-COMMUNICATIONS Ltd,

Harpur House,

17 Charterhouse Street,

London EC1N 8RA

Tel: 01-405 9489/2210.

Copy, copy queries, remittances to:

John E Tebbury,

New English Library,

Barnard's Inn, London EC1N 2JF,

Tel: 01-242 0767.

How to obtain your copies:

Each monthly issue can be obtained by placing a regular order with your newsagent or you may take out a postal subscription. Cost of a subscription for one year is £4.35 within UK, Eire and overseas (including postal and packing charges). Send a crossed cheque or postal order made payable to New English Library Ltd, to: Subscriptions Department, NEL, Barnard's Inn, Holborn, London EC1N 2JF.

Back Numbers:

Available on order - UK 27p each: New English Library Ltd, Barnard's Inn, Holborn, London EC1N 2JF, Australia, Gordon & Gotch Ltd, 374-380 London St, Melbourne 3000; New Zealand: Gordon & Gotch (NZ) Ltd, PO Box 1588, 102 Adelaide Rd, Newtown, Wellington; South Africa, Central News Agency Ltd, PO Box 10977, Johannesburg.

© New English Library Ltd, 1974.

Reproduction of any written material or illustration in this publication in any form or for any purpose, other than short extracts for the purposes of review, is expressly forbidden unless the prior consent of the publisher has been given in writing.

Neither New English Library nor its agents accept liability for loss or damage to colour transparencies or any other material submitted to the magazine. All information published herein is correct at time of going to press.

Cover: Painting by Geeth Colman

Contents

Return to Earth by Christine Stinchcombe	2
SF on TV by John Brosnan	5
Modern Masters of Science Fiction by Walter Gillings Number Seven: John W Campbell	9
The Last Evolution by John W Campbell	10
The Size of Things to Come written and drawn by Malcolm Poynter	14
Readers' Letters	19
The Query Box	19
Fanzines In Focus: <i>Cypher</i>	20
Cosmic Echoes by David Stammers	21
Our Loves, So Truly Meridional by Ian Watson	25
News	27
Film Review: <i>Dark Star</i>	28
Crossword Competition No 4	28



Vol 2. No 1.

Perhaps by the time you read this the sf film *Dark Star* will have become more available. So far it has received only one showing in London and luckily John Brosnan was busy delving into the annals of tv science fiction unearthing some very interesting facts about Mr Spock's ears, among other things.

Walter Gillings is still writing about Modern Masters of SF concentrating on John W Campbell, best known for his editorship of *Astounding Stories*. The short story accompanying the article is *The Last Evolution*, first published in 1932 in *Amazing Stories* and as far as I know not reprinted in England before.

For more contemporary fiction Ian Watson, the author of *The Embedding* and also the short story *Sitting On a Starwood Stool* which appeared in SFM Vol 1 No 10, has contributed *Our Loves, So Truly Meridional* which indeed traces a rather strange theme.

The rest of the fiction comes from the winners of the Short Story Competition and includes *Cosmic Echoes* by David Stammers who was one of the four best UK entrants and *Return to Earth* by Christine Stinchcombe, the best foreign entry.

This issue has departed from the regular trend of the magazine, usually there are two articles and only three stories, but some of you have suggested that SFM should live up to the word *fiction* in its name. On the other hand some of you have said that you can buy science fiction in paperback form everywhere but articles about sf are hard to find.

Nevertheless whether this particular issue pleases you or displeases you, rest assured that SFM suffers, by no means, from a rigid format; for example our latest innovation is the SFM comic-strip - *The Size of Things to Come*.

Take any Three of these great BARGAINS

at only 10p each (plus p&p)

as your introduction to

Science Fiction Book Club

Join the growing thousands who enjoy the very best in science fiction, carefully selected by our own editors and the well-known novelist and reviewer Edmund Cooper. This getting together of people who really care about science fiction makes it possible to give a unique combination of bargains and quality. For one thing, our best-selling full-length hard-back editions come at paperback prices (up to 85% off publishers' editions). Enjoy six months top reads for half the cost of buying a good book by authors like HARRY HARRISON, LARRY NIVEN, FREDERIK POH, J. R. ANDERSON and other top writers. Also many extra bargains are offered without obligation. Your only commitment is to take one book a month for six months but we will be surprised if you don't stay with us a lot longer.

Magnificent Introductory Offer

Join today and take advantage of our introductory offer and complete yourself of the exceptional value we offer our members - any 3 books for only 10p each (plus 45p p&p). (all prices exclude p&p)

ISAAC ASIMOV comments: 'The Science Fiction Book Club is an admirable way in which to keep up with the very best science fiction books published and I wholeheartedly recommend it for its quality and value.'

Science Fiction Book Club, South Devon House, Newton Abbot, Devon Reg in England No 8489-86

Choose your introductory books and post the coupon today!

Top Science Fiction Book Club, PO Box 5, Newton Abbot, Devon, I would like to join the Science Fiction Book Club for a six month's membership (one book a month) and will therefore give one month's notice if I wish to resign. I deem the three introductory books at only 10p each (plus 45p towards p&p) indicated below.

Please send books numbers (fill in and check) or please remit in advance)

I will pay upon receipt for any books I choose

To save on small transactions I enclose an advance deposit of £4

Name:

Address:

Signature:

(Signature of Parent or Guardian if under 18)

RETURN

The New Age Religion was officially recognised by the Government during the fourth World War of the twentieth century, since its metaphysical and scientific practices proved helpful to the country and the world as a whole,

read Sandra in her twenty-seventh century English dictionary. She was looking for more information about four members of a twentieth century space crew whose first attempt to man an antigravitational spacecraft was commemorated on this same day by a minute's silence during a TV news report.

They were remembered with respect since their feat allowed new pollutionless techniques to develop and progress. They had also helped, before leaving Earth, to propagate truths connected with this Religion of the New Age and had been, in the 1970s, among the few to be aware of such truths, ie the existence and working of Cosmic Laws which rule mankind's destiny and the many incarnations of every man on Earth. They were metaphysical scientists and had built their own spacecraft after years of research in the fields of antigravity and the 'vibranic' system of population. Finally, they had been instrumental in bringing peace to Earth.

Men knew about their Venusian and Martian neighbours, although only a few had met these wonderful beings in the year 2600. Flying saucers, their spacecraft, had not officially landed as—according to their Terrestrial agency, a group of New Age Religion Initiators—terrestrial evolution had not reached the required level yet. Only High Initiates in spiritual truths were in direct contact with the representatives of Interplanetary Parliament and the Occult Hierarchy of Earth. This fact was well known by the public, but still, some did not believe it to be true.

A photograph of the twentieth century space crew had been shown on the screen and Sandra had become pale. She knew the three

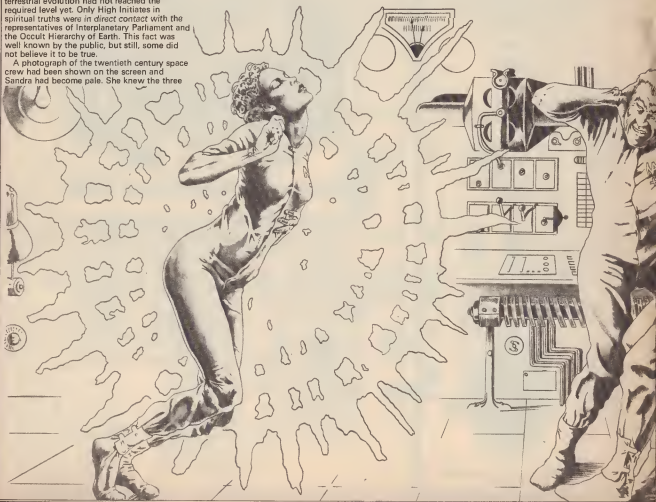
men but, the fourth member of the crew was most amazing; this young lady with short, blonde, curly hair and green eyes could have been taken for Sandra herself! She could not remember them but a mysterious emotion had suddenly arisen in her heart as though vague memories of the past had been unlocked from her veiled subconscious mind. And yet, how could she possibly have known any member of this crew who disappeared in space 600 years previously, to the day, and never came back?

A week later, Sandra went to the famous Devon Temple of England where she had applied for an interview with the High Priest. Situated on a holy and spiritually historical spot, the Temple was a place where one could worship the Absolute, pray for one's kind with the help of special spiritual practices apparatus, which made prayer more powerful, and where one could also receive healing from an advanced instrument in its Sanctuary.

The harmonious shapes of the white building had a strange vibratory effect on those who stepped on its marble floors. From behind a violet-coloured velvet curtain appeared the tall, wise, middle-aged figure of an Initiate of the New Age Religion who was wearing the golden robe of wisdom. He was known as the Reverend High Priest of the Temple and the High Representative of Spirituality for European Countries.

There were only five High Priests in the world and these met every year in the presence of a Member of the Occult Hierarchy of the planet who still lived in their secret retreats under a few Holy Mountains of the world. These masters could remain invisible to man if they wished as their own level of vibration was higher than this plane's matter. The High Priests ruled a peaceful world as the heads of each continent only acted on their advice. However, peace had only been achieved by men the hard way: after a holocaust of nuclear wars, geological catastrophes and cataclysms which brought mankind to realise painfully that it had invoked the anger of the elements by its own actions, or infringement of Cosmic Laws.

Pioneers of this Peace had actively fought the evil of Earth for centuries after it had been given its greatest defeat. Thousands had gathered in small groups in different countries throughout the years, teaching truths about life and the Universe, trying to save thousands, millions of people from involution, people who had been conditioned to keep the fallacious illusion that there is only one life, a belief which had been instituted by evil political minds of mediaeval times, and to whom it had been taught to go to war, to kill their brothers, to build terrible weapons and through their use pollute and upset the very sensitive balance of



INTO EARTH

the planet. Some of these men claimed to be Christians!

It had been madness! All they had was this world, the Earth they tore to pieces. She who behind her simple planetary aspect is a living, breathing Intelligence. No object is inanimate as all the Universe is a manifestation of the great Living Creative Power behind all things, of which Man's spirit is a spark.

Science had even been prevented from progressing towards its simplest, pollutionless forms, because it would have meant that new discoveries would have stopped the need for the old, new unlimited sources of energy would have made the others unnecessary. What then of the powers of the world who controlled it and could even blackmail it through its need of energy?

During the last days of the old order, the situation had become so bad that the sky of Earth had no longer been a safe place to fly as radioactivity had increased in the atmosphere and caused mysterious aircraft explosions through distortion of their etheric counterpart. Radioactivity on ground level had caused fires to develop with no apparent reason and to spread so quickly that hundreds of people could not be saved from a terrible death.

Yet, in the midst of confused crowds were

incarnations of Interplanetary Intelligences who guided the people and fought to pacify all realms of Earth. The pioneers of peace worked with them and set the foundations of the new order with people who had turned back to Nature, Love and Harmony.

'O! High Priest, I have come to seek your help!' said Sandra as she sat with the High Priest in the room of the Golden Disc. 'I seem to be obsessed with strange emotions and discontentment since I have seen a photograph of the famous first space crew which never came back here, and there are also so many questions I ask myself about life. I would like to know about the truths it is said the Priests of Temple can teach!'

'O! My child, you have come for Truth and you have been long expected', answered the High Priest of the Temple, one of the representatives of Spiritual Light. 'Follow me and with just a little help, you will remember all knowledge you gained during your past incarnation. The channel between your subconscious mind where all memories are stored and your new physical brain will be opened and you will remember! You will know why you feel troubled deep in your soul and that it is She who sends Her calls of the past to you!'

'I can see the signs in your aura!' he added 'those marks which make you one of the few persons of this planet to whom we may reveal the past. They have been chosen by the Cosmic Hand of Fate whose mysterious Plan for this world is only known by the Greatest of Saturn.'

And so, the High Priest placed the Akasha* reader on Sandra's forehead and there on the screen, as in a dream, appeared the first pictures of the main events of her previous incarnations, as they emerged from her memory.

'Of course, this is not Earth!' he explained, as scenes of a highly technological and mechanised civilisation materialised on the screen. The planet exploded because man's heart became diseased with the desire of power and because he experimented with Nature's forces. The scientists of 'Salex' unlocked the forces of the Atom and destroyed themselves. It was a Cosmic Crime for which mankind has only just about repaid all its debts. The souls of Salex reincarnated, indeed, on the Earth which has also its own race of humans evolved from the animal kingdom. The Engineering race of

*Akasha: Etheric matter which records all events of life and which advanced people can read; ie: Akashic records of Earth; all that has existed has been recorded. The personal akashic record of a human being is situated at the level of the etheric body in the aura.

Salex was symbolised by 'Techniter', and the terrestrial race, as 'Autochtone' in Phoenician legendary history.

'It seems I have vague ideas about some similar happenings in the past' said Sandra. 'It was 18,000,000 years ago the priest continued' and this is recorded in the most ancient civilisations' traditions but, unfortunately historians and archaeologists have not dared to take their ancestors seriously until science provided material proof that man's history can be traced as far back as so many million years.'

Another two scenes of great civilisations appeared on the screen, but this time these were on Earth.

'Yes, mankind was brought to this planet because all that was left of its own world was the cold, uninhabitable Moon which had previously orbited, as Salex, between Mars and Jupiter. It became the Earth's satellite because of its karmic link with mankind and for other reasons. Men were giants in those days but discovered deadly weapons at the same time as wonderful scientific machinery which allowed them to conquer gravitation. They had flying objects called 'Vimanas' with which they could stay in the air as long as they wished, thanks to the very natural pranic system of obtaining energy.'

'The civilisations of Lemuria and Atlantis destroyed themselves by invoking the negative repercussions of the Cosmic Laws and they both disappeared at hundreds of thousands of years interval in the holocaust of the elements' fury. The Earth flipped on its axis and moved away from the Sun. Lemuria was burned by fire 500,000 years ago and Atlantis sank in the Atlantic ocean 70,800 years ago. Each time man destroyed his civilisation, he followed a dark age, some of which coincided with Ice Ages of the Pleistocene era, during which he had to rise again from mutation and limitation caused by radioactive elements.'

'The Earth flipped again 12,800 years ago, causing more great catastrophes and the sinking of a few islands where civilisation had flourished and science progressed.'

'The inheritors of Atlantean sciences perished, the world was born again free from any link with the past, and many thousands of years later, knowledge became secret because it was considered dangerous. Some nations wanted to be remembered in history as the fathers of mankind and therefore nationalised foreign ancient heroes and initiates of their traditions.'

'Historians of the twentieth century never suspected that the pyramid of Gizeh was more than 70,000 years old. The reason is that it was wonderfully preserved by the continuous pranic flux which pyramidal shapes have the property to attract through themselves.'

'The Atlanteans had housed a Vimana and various advanced instruments and weapons which the Egyptian Moses was initiated to use by Space People who visited the Earth, some 60,000 years later. With advanced Atlantean scientific apparatus he was able to open a passage in the Dead Sea's floods for a people which had to be saved from great catastrophes due to be cast down all over the world. They were protected in the desert whilst the Earth flipped and turned again on its axis and they saw the Sun rising at the place of its setting. The planet was, moreover, pulled out of its orbit, and because of this, all calendars had to be reviewed and a few days added to the year.'

'And now, here is the Essenic period' the



priest continued.

'Yes, I can see now, said Sandra, that the very famous Christian religion of the twentieth century must have been terribly distorted if it is to be compared to the original teachings given by Jesus Christ, who now know was an aspect of a Cosmic Master from the Planet Venus, in the same way as Buddha and other teachers were.'

'You had a friend 2600 years ago?' the High Priest began again, as the strong figure of the Greek Demetrius appeared on the screen. 'You were both slaves of a rich Roman aristocrat. Demetrius was and still is your soul mate, wherever he is now, and he was your husband in your past life and the companion with whom YOU LEFT EARTH ON BOARD OF THE FIRST ANTIGRAVITATIONAL SPACECRAFT 600 YEARS AGO!'

'So that's why...?' Sandra thought, but she could not reply because she was so much of a revelation for her and yet deep in her heart and her mind, she was expecting it. She had always known that it had been so, she could, therefore, not disbelieve the Priest, who continued:

'You have my dear child, God's ways are sometimes mysterious. We were told to await your coming to us, because you would be guided here, so that we could accomplish what the Cosmic Law expects of us.'

'Demetrius' image was on the screen, and indeed she felt a tremendous psychic and physical attraction towards the man who had risked his life to spread the freshly-given Christian teachings and to help save his friends from Roman incursion.

'I don't understand' she said, 'How could I help you accomplish what the Law wants you to do?'

'Have you ever heard about the prophecy concerning this twentieth century crew? Is it not said that they will return?' asked the priest.

'Oh, yes, indeed, I remember now, it has been the subject of conversation between some of my friends at the College of Sciences, but for some reason I never really wanted to investigate the question,' she replied.

'Yes, well, Time had not come, but it has now, Sandra, you are one of the few privileged people to have received the initiation of the Akasha reader. This is through your strange karmic pattern so that we may use your help. Are you ready to give us full cooperation?'

'Yes certainly,' replied Sandra, 'but I still do not see how I could be helpful to you.'

'The "karmic link" said the priest, 'the twentieth century crew has disappeared in space and you are the agent-chosen by the Karmic Law who will help us to trace them. The reason is that divine intervention has not been permitted in this case and we, the members of terrestrial kind, are to rescue them by our own, without the help of other worlds' high technology, such as that of Venus, Mars or Jupiter.'

'But, was it not in the twentieth century that THEY LEFT EARTH? What became of them? THE CANNOT POSSIBLY BE STILL ALIVE!' exclaimed Sandra.

'No, indeed, normally they could not, and one of them isn't! YOU! This is why you are here. You reincarnated, my child! Your soul was attracted back to Earth at the speed of light as soon as it had left your previous dead body. But the Law is compassionate and it allowed you to be led invisibly to us so that we could use your mind to find out WHAT happened and WHERE the others are. Be confident in this Law, it is like the mind of the universe, the One Creator, who has made us. For we do not know what miracle, although I have some idea of what might have happened, your three space friends were preserved from death. They, therefore, are now 600 years old. Yet, maybe they are not! If they had died, they would have reincarnated as you did, and we would not have been instructed about your visit. If you will just let me carry on with our Akasha experiment, we shall find out about it all and then, we might be able to go and get your friends out of their mischief! Wherever they are!'

The colourful screen showed the crew in their silvery spacesuits aboard the first terrestrial flying saucer. They desperately wanted to bring material proof to the sceptical men of Earth which would confirm the claims of the New Religion and stop misadventures with nuclear wars. They had landed on Mars, where as on all other planets, they could only see and contact the inhabitants through their psychic eye, unless these would materialise for them, because all life vibrates on a higher level on the other planets of the Solar System. For the first time, they had stood in delightful

amazement and realisation of the presence of radiant Space People who are taller than humans and whose bodies are beautiful and made of more refined matter which does not age or become diseased. These inhabitants of other worlds would only meet them in a small aspect of their full consciousness for which they would materialise a body on a lower level of vibration to their own.

Martians live underground and have done so since the explosion of Salex, because Mars' surface was continuously bombarded by meteorites. However, their skin looks very sun-tanned. So is the Venusians' which contrasts with their long blonde hair and blue eyes. They live in Cosmic love, in harmony with the forces of Nature and of their planet, which they can tap with their minds.

Sandra could now remember the Temples of Light and all sorts of prodigious phenomena she had seen during her past incarnation.

She and her friends had tasted the happiness of a more advanced civilisation to which they did not belong. They had been allowed to land on Mars, Venus and the giant Jupiter, a whole paradisiac world made of music, colour and perfumes, which also provided a good accommodation for galactic visitors—but not on Saturn, as the Spiritual Light and Divinity of Its Perfect and Revered Inhabitants was too sacred to let it be disturbed by the presence of terrestrials.

They had kept a radio contact with an Earth base and their scientific information and revelations caused a real revolution on the planet which proved very beneficial for the future. Their scientific cooperation came as a proof and a confirmation of the new Religion's teachings which were recognised overnight by the twentieth century governments.

They were surprised to actually visit most inhabitants of other planets absorb solar and pranic energies instead of breathing, eating or drinking. There is, indeed, a vital energy in the atmosphere of other planets just as there is on the Earth's, although it is not composed of as much oxygen.

They were told pranic energy is responsible for the manifestation of chemical elements of gases, and that human breathing is an automatic system ensuring the absorption of oxygen which man cannot consciously control. If he could, he would not need the presence of oxygen in the Earth's atmosphere, which carries this vital energy, he would simply, as other planets' inhabitants, directly use solar radiations and magnetic energy fields around their world. The origin of human misery, they were told on Mars, is man's transgression of Cosmic Laws. Death is a change of environment and the new born baby's body is the result of its super-conscious mind's visualisation which has already its parents and its reborn. Reincarnation is repeated until man has learned through experiences and attained the spiritual goal or level of evolution. There is an energy release from a man's action. This karmic influence is repaid by the same person as the reaction to his own action. In this way are human incarnations ruled and linked together with the goal of providing experiences to human souls. When it is attained, the individual joins higher life-streams to lead an interplanetary existence.

The crew found out that Martian Intelligence uses energy impulses to create people to create their physical body and recreate a new one. So, they never pass through a state of unconsciousness such as human 'death'.

Pictures were radioed back to Earth with evidence that life exists after death, on different levels of existence and of evolution, in accordance with Karmic law in man's lives. And, so people realised on Earth that THEY WERE THE ONES WHO WERE GOING TO REINCARNATE IN THE MUTATED BODIES AND THE KARMICALLY LIMITED EXISTENCE THAT THEY WERE PREPARING FOR THEIR CHILDREN'S CHILDREN BY THEIR NUCLEAR WARS AND UPSETTING THE EARTH'S ENVIRONMENTAL BALANCE. THEY UNDERSTOOD THE MESSAGE OF THE NEW AGE RELIGION AND OF THE MYSTERIOUS VISIONS OF THE UNIDENTIFIED FLYING OBJECTS, AND CHANGED OVERNIGHT!

There were Temples of crystal on Venus where the view of beauty, harmony and divinity was unbearable for a simple emotional human being.

After years of study from a base on Jupiter, where they could learn about the whole Galaxy, they probed outside the Solar System and sent no more signals back to Earth because they were not allowed to interfere with the planet and to protect their material and a device on board of their spaceship which

transferred them outside of Time. These extragalactic types of robots, indeed, still attempt from time to time to spy or attack parts of our Galaxy, although they have been heavily defeated by the forces of the Interplanetary Parliament. The terrestrial spaceship did not have enough power to fight the aliens and they had to use this out-of-time projector which had not sufficiently been tested and had a failure. They became prisoners before the barriers of Time.

'You Sandra' said the Priest 'you lost your life at the androids' first fire. When they realised they had nothing to fear from you, you in our world was that you were not one of the most indestructible Interplanetary Parliament spacecrafts, they stopped firing and decided to get the crew alive to study their bodies and gain information on the Solar System. It is then that your friends took refuge out of time where they hoped the aliens could not reach them. For 600 years they have been frozen in another vibration without being able to feel any time progression. They must have been living an eternal moment, I hope for them it was a blissful one.

The analysis was over. The Priest's technical assistants who had remained silent, had obtained all information required, so therefore the High Priest called for an Emergency Stand-by and invited Sandra to take part in the operation.

A large space rescuer took off from the Devon Sanctuaries Airport and glided away smoothly towards Pluto's orbit which they reached three days later.

The crew of about a hundred space travellers initiated into Spiritual sciences and space navigation was aboard on that ship which was to bring the twentieth century flying saucer back inside Time.

Sandra was told a vessel in a state of dematerialisation had been located. Would her husband of the past still be alive? The Priest had told her she had to be. She desperately hoped so, as she seemed to have found a new meaning in life since she had gone through the Akasha Initiation. She had someone to live for. She would look for him anyway because her life had seemed so dull until this happened! Anthony, Anthony and Thomas could not understand where they were, and what had happened when they were brought back from beyond the frontiers of time. As he stepped out of the craft, Anthony saw the living phantom of his wife whose dead body he was still holding in his arms! He was shocked and intrigued until the High Priest had explained that Sandra's soul had remained on other realms of the Earth, preparing for reincarnation, whilst they were caught in the webs of the unknown, and that they had been rescued in the year 2600. Anthony concluded:

'I am very fortunate to be able to see my wife resurrected, living in a same body, so soon as what has been for me, just after she had died.' He asked her 'Do you really remember me? Have you not changed? Are you really the same as you were?'

Sandra assured him her soul had been true to him. The power of love, the mysterious power of the Universe had reunited her to the one she loved and she asked him to call her by the name she used to have: Paula. With strange feelings she contemplated her dead body which was identical to the one her Spirit had moulded again.

Once more Cosmic Masters had not been allowed to intervene on behalf of terrestrials. The law had stated that mankind had to be responsible for itself, otherwise, it would never learn to advance and gain spiritual maturity. Space travel had been achieved without the help of the elder brothers and now, a crew of three men had been rescued from eternity by its own kind.

It was a great achievement, another step in evolution, forever written in the Akashic records of Earth and the Solar System.

None of the three men ever wanted to go back to the past, even if it had been possible, because their outlook had been changed through seeing life on the other more advanced planets of the System and they would have felt alien to their own time.

The tremendous, fantastic experiences they had undergone had made them so different that they felt more attuned to the time they were presently in. The New Age technology was so advanced and so different that it proved to be a paradise for the scientists and astro-metaphysicians that they were.

All that remains to be said is that in the end, the Akashic Law had shown and provided Perfection. ☉

SF on TV

AMERICA

Thinking about science fiction on television today, programmes such as *Star Trek*, *Dr Who*, *Time Tunnel* and *The Six Million Dollar Man* immediately spring to mind. But how many more were there? In this article, which will stretch over two issues, JOHN BROSNAN has been investigating the American TV scene looking for any sf-orientated shows screened over there in the past twenty-five years. He's unearthed some fascinating information, especially about Mr Spock's ears; so if that arouses your curiosity, then read on.



P



A



R



T



1

LOST IN SPACE
SPACE 1999
CAPTAIN VIDEO
BRILLO?!



STAR TREK
OUTER LIMITS
GENESIS 11
TIME TUNNEL

Despite the big boom in science fiction films in America during the 1950s, there was little reflection of this phenomenon on the country's TV screens. The reasons were obvious; TV was in its infancy; many shows were televised live and budgets were very small, all of which meant that it wasn't possible to provide the elaborate sets and special effects that science fiction demanded (at that time science fiction was synonymous with monsters and spuds apart). One early American science fiction series that did appear in spite of these restrictions was *Captain Video*. Aimed at young audiences it simply ignored the problems of convincing sets and effects. Its frequent use of such devices as cardboard space-



ships being pulled across portholes on strings made the cinema serials of the 1930s, *Flash Gordon* for example, seem like a distant episode in comparison. But despite the obvious cheapness of the production *Captain Video* became very popular and is still remembered with a great deal of affection by many grown-up Americans today.

A more dignified attempt at putting science fiction on TV came in 1956 when CBS launched their series called *Science Fiction Theatre*. It may have been more dignified but it wasn't as much fun as *Captain Video*. Each half-hour episode was introduced by a distinguished and distinguished looking gentleman seated at a desk that was covered with peculiar objects that looked vaguely scientific. The stories that followed were so tedious and uninteresting, apparently because producers' aims were to make the science fiction could be serious, that the series must have discouraged many a potential science fiction fan during the short time it ran.

In 1959 things took a turn for the better when *The Twilight Zone* appeared. It was basically a fantasy series but featured many science fiction stories during the five years that it ran. It was the brainchild of Rod Serling, one of the most honoured and respected writers working in American TV (he had won three Emmy Awards by 1960). Including one of his most famous, *Requirements for a Heavyweight*. Serling wrote twenty-two of the episodes himself and it was probably his prestige that enabled such a daring and experimental, as it was in those days, series to be produced. One important science fiction writer who wrote several episodes for *The Twilight Zone* was Richard Matheson. They included *Little Girl Lost*, which was a bizarre piece about a child who falls through a 'hole' under her bed and becomes trapped in another dimension, *Star 80*, which starred Lee Remick as the manager of a robot boxer who takes the machine's place in the ring after it breaks down... with painful results, and *Nightmare at 20,000 Feet*. The latter starred William Shatner (later of *Star Trek*) fame as a man in a plane who keeps seeing a strange creature land on the wing and tamper with one of the engines. Of course when he attempts to warn the other passengers and crew no one believes him... the creature always disappears when anyone other than Shatner looks out of the window. Talking about this episode Matheson said,

"I thought Bill Shatner was absolutely superb in *Nightmare*. The part of his wife was not done well at all and the creature out on the wing was done abysmally. I was actually working with Jacques Tourneur (a noted horror film director) and he told me he would have shot the creature in a black suit, completely black from head to toe, with some sprinklings of silver dust on him so that you could have seen it. It was done so well enough, the actor who was under that monkey suit that made him look like a panda bear, was Burt Lancaster's old partner, Nick Cravat, an Acrobat. Actually, if he had played the part just as himself with some sort of crude outfit or if he would have looked exactly as I described the creature in the story and in the script, and it would have been more effective. But I thought Les Marvin was marvellous in *Steel*. That was definitely one of my favourites."

But together with Matheson were twelve episodes of *The Twilight Zone*. Between them, Serling and Matheson brought a litaney to televised fantasy and science fiction that hasn't been seen since on American TV (Serling's more recent fantasy serial, *Night Gallery*, in 1971). In 1960 he wrote *The Outer Limits*, a series that was less ambitious than *The Twilight Zone* but almost as memorable. Its prevailing mood was similar to that of the science fiction films of the 1950s with monsters of a wide variety either arriving from other planets (and one episode by a channel being bounced off the moon and burst through a TV screen), from the future or, in one episode, actually crawling out of the woodwork. Monsters were everywhere in this definitely quirky series. There was even one lurking in our couple's wedding reception, reduced them in size when they looked inside the box and as a result the couple spent a couple of decades trapped inside their own wedding present, along with the monster which resembled a shapeless mass with a single eye. It was a real shock but completely clear why the thing was inside the box in the first place.

But apart from such totally weird episodes there were many that were based on genuine science fiction ideas. One of the best was *The Invictibles* which starred Bob Reynolds in a story that was very similar to Robert Heinlein's *The Puppet Masters*—aliens that look like hairy crabs take over people by attaching themselves to the back of their necks. Science fiction writer

Harlan Ellison also wrote several scripts for the show; including *Soldier*, which was about a futuristic soldier, and the famous *Demogorgon with a Glass Hand* (shown at the 1971 British Science Convention). This concerned a man in a deserted building being pursued by a group of mysterious aliens. He doesn't know why he is being chased, but even when he is given explicit instructions from his artificial hand, which has three fingers missing. When the fingers are located, the hand tells him, he will know the reason for everything that is happening. When he succeeds in recovering the fingers the man, played by Robert Culp, is disturbed to discover that he is actually a robot from the future sent back in time to safeguard humanity from an alien invasion. He carries with him the entire consciousness of mankind engraved on a metal disc. *The Outer Limits* was also written by Harlan Ellison, who directed. That particular episode was directed by Byron Haskin, famous for films like *War of the Worlds* and *Robinson Crusoe on Mars*.

The Outer Limits was originated and produced by screenwriter Joseph Stefano, best known for his screenplay of Hitchcock's film *Psyche*. In his book *Science Fiction in the Cinema* John Baxter said that the series contained some of the best science fiction ever to be presented on television. He may be right—it did present one of the best.

As Outer Limits was sinking quickly into limbo (it only lasted two seasons because of poor ratings) another science fiction series was enjoying great success. It was called *Voyage to the Bottom of the Sea* and it was written by a man called Irwin Allen who had based the series on his successful film of the same name (released in 1960). This was only the first of several such titles that Allen was to unleash upon a delighted viewing public—the others being *Lost in Space*, *Time Tunnel*, and *The Giants and City Beneath the Sea*.

Voyage to the Bottom of the Sea was about the adventures of Admiral Nelson, played by Richard Basehart, and his crew in the atomic submarine *Seaview*. The name *Seaview* was apt because the submarine had windows in its nose, a rather useless and dangerous innovation for a real deep-water vessel but at that time there was plenty of light in the tank at 20th Century Fox studios. The series was never as successful as that week Nelson and his band of stalwarts would fight and prevent the submarine from being swallowed by various giant creatures, such as a giant octopus, a giant whale, a giant eel, a giant jellyfish or a giant piece of sentient seaweed. If they were unable to protect the ship from external dangers then they were trying to prevent it from being taken over internally by mad scientists, robots, androids, mummies, pirates, ghosts of U-Boat captains, deranged crew members (particularly those who were considering the circumstances) and sentient pieces of seaweed. As the series progressed the hazards became more and more esoteric. In one episode several members of the crew, including a miniature submarine, actually swam inside the giant whale (he made more than one appearance during the series). The actors spent most of the time walking around in what appeared to be a room full of wet, inflated plastic bags. But matters didn't happen that way and his men were able to spend part of each episode running from one side of the set to the other to simulate the vessel being violently rocked while the effects men showered them with sparks from exploding fuse boxes.

Actually, considering the limits of the budget, the effects in *Voyage* were relatively impressive. In charge was LB Abbott, who handled the effects in most of Allen's TV series and films (Abbott won an Academy Award for his effects in Allen's production *The Poseidon Adventure*). Abbott described some of his work on the series:

"There were three models of the *Seaview* built: For shots on the surface a twenty-foot model was used, an eight-foot one for underwater shots and for sequences like the one when we used a live octopus we had a four foot model. A tiny man sub used in several episodes was only eleven inches long. In filming the sequence where the octopus attacks, one scene had to show the octopus clinging to the glass ports in the nose as seen from inside the sub. A small, light-weight man sub with a tank on top, only twenty inches, was induced to cling to a pane of glass mounted before the camera, thus providing a view of its suction-cup studded underside. Shooting this from a distance of five feet was a real problem, which was solved by using the creature's mid-section. This was matted into the ports of the full-size submarine set."

After the success of *Voyage* came Allen's next series, *Time Tunnel*. This was built around the formula of having two men adrift in time though

monitored and partially under the control of a group of technicians at the other end of the time tunnel. At the end of each episode the two men, played by James Darren and Robert Colbert, would be whisked away by the technicians and dropped in another era to face some new cliffhanger. It was a very clever idea, however, that was never realised by the show's writers who were restricted by Allen's view of what constituted television entertainment. As a result the show was a rather ladden affair, even less interesting than the BBC's *Dr Who*. The two men were always popping up in places where a matter of historical importance were just about to take place, such as on the *Titanic* the day before it was hit by an iceberg. A typical example was an episode called *Invasion*—the two men appear in France during the Second World War before D-Day. Immediately one of them is captured by the Gestapo and brainwashed by a mad scientist into thinking he is a Nazi killer, while the other one, naturally, becomes involved with the French Resistance. At the end of the episode the two men are transferred to mainland England, that in time to blunder into Robin Hood who is trying to escape from King John's castle after an abortive attempt to make him sign the Magna Carta. Of course the writers were also limited by the budget. *Time Tunnel* was a very expensive show consisted of stock footage from old films.

Rather more fun was another Allen series, *Lost in Space*. This concerned a typically American family of the future—Mom, Dad and their three angsty children—lost in space. The family was *blown away* on a remote planet after their spaceship had crashed. Actually their troubles were caused by the evil Dr Smith, who was working for an 'unfriendly power' (there were often references to 'unfriendly powers' in Allen's series). Also stranded on the planet was a mad scientist and a pilot who was included in the show to provide a rather sterile love interest for the oldest daughter. Based on *The Swiss Family Robinson* (the original title for the series had been *Space Family Robinson*) it began by concentrating on the problems the family faced coping with life on the desolate planet, as well as the frictions within the group caused by Dr Smith; the men wanted to get rid of him but the women and children were in some way too friendly—perhaps neutral. The writers soon exhausted their ideas for this situation and before long all manner of alien was dropping in for a visit. Alien monsters, alien policemen, alien circus performers, alien aliens... not one of the castaways could now be allowed to die. The alien who was killed by another wrecked alien spaceship. Despite being a supposedly remote planet an incredible number of aliens managed to blunder into it. Strangely enough, the visitors always managed to get away from the planet by the end of each episode, something the *Robinson* family and friends never quite succeeded in doing.

Land of the Giants was another series built around the premise of a group of people stranded on an unknown planet. The twist here was that the inhabitants of the planet were actually dressed and talked like contemporary Americans) were very, very big. Gigantic, in fact. As was the case with most of Allen's series, the premise was a very shaky one scientifically speaking. Obviously, if Allen's series were true, the people there about a hundred times the size of normal people would have been crushed under its own weight. But then Allen has never been one to care too much about the strictures of scientific fact, as is demonstrated by his exploitation of the idea of running from one side of the set to the other to simulate the vessel being violently rocked while the effects men showered them with sparks from exploding fuse boxes.

"Everything in the set was out-sized... the pencils eight feet long, books fifteen feet high and the chest of drawers eighteen feet high. The shots of the inhabitants of the planet were photographed on the giant set and then shot of the "giants" would be filmed on an exact duplicate of the set built to normal scale. Use of the two sets demanded the most precise timing and planning of all the series. The camera men were on each set so that they could match up every camera angle and set-up exactly. While he was up on the crane checking camera angles an art director appeared carrying what looked like a sketch of a blob but was actually a costume for a marine mammal scheduled to appear in the episode *Voyage Beneath the Sea* episodes. Allen finally caught a hint of him.

"It better be important," he shouted down from the crane.

"It just wanted to show you this sketch, Irwin," the art director said.

Allen beckoned for him to send it up. "Okay one monster," he said finally. He gave the sketch one more check. "One thing. His mouth. Does a monster have a mouth? He has a mouth. He has a mouth. The sketch artist looked bewildered. "We hadn't

Continued on page 18

Modern Masters of Science Fiction

By Walter Gillings



With a firm hand and questing mind,
he led science fiction along new paths
and fostered its finest talents.

7: JOHN W CAMPBELL

of readers, the Golden Age of science fiction opened. For many thousands of years, the Golden Age of science fiction opened. For many thousands of years, Campbell became editor of *Astounding Stories*. It reached its peak in the 1940s, as he featured the work of a brilliant new school of writers he had nurtured; work which has lasted through the years and is still being read today.

There are some who contend it was purely coincidental that writers such as Heinlein, Asimov, Sturgeon and van Vogt found opportunity to develop their individual talents at this time. But all the evidence suggests that, if it had not been for Campbell's flair for developing new writers, and for his determination to raise the standards of science fiction, the literature might never have taken this spectacular turn for the better.

It was his own contribution to the medium, not so extensive as those of his more successful 'finds', they were most influential in their day; and the stories he wrote under the name of Don A Stuart are still highly regarded, even if the much-vaunted 'poetic' prose now seems somewhat tortuous. It is, in fact, as an editor rather than an author that he has earned his place as a master of science fiction—and his was indeed a masterful personality, dogmatic, energetic, and completely dedicated, compelling respect and admiration often amounting to awe.

John Wood Campbell, born 1910, was the son of an electrical engineer employed by the telephone company in Newark, New Jersey. At school he made few friends; at home he had to contend with a father who was a strict disciplinarian and a mother who were beyond him, and a sister who had a twin sister so identical that he could not tell them apart. His own sister being seven years his senior, he was forced to his own devices such as basement chemistry and bicycle repairing. He also found solace in reading, graduating at the age of 8 from Burnhoughs' tales of Mars to more serious works on astronomy.

As he was sent to an exclusive boys' school where he made enemies of his teachers by pointing out their errors, and learned to play a good game of tennis. He did well in physics and Spanish, but left without a diploma. In 1928 he enrolled at the Massachusetts Institute of Technology, where he found a friend in his room-mate and another in his chemistry professor—attestating the fallacy of 'the ideal student'.

By then he had become a regular reader of *Amazing Stories*, in which he found scope for spotting scientific errors committed by untutored writers. But his imagination, unhindered by his passion for logic, was fired by chemical engineer Edward E Smith's stirring epic *The Skylark of Space* (1928). It was his first, more an anything, and it led Campbell to writing notions of interplanetary travel in which original notions and scientific postulations were equally balanced, and in which the human characters knew exactly what they were up to even if the readers sometimes didn't.

His first acceptable manuscript got mislaid in the editor's office; but he made his bow in 1930 with *When the Atoms Failed*, in which his scientist hero built an electronic calculator to assist him in devising a route from Mars and setting himself up as guardian of two worlds. In a sequel, *The Metal Horde*, the same genius got the better of a thinking machine from Sirius and its menacing minions. And it seems likely that the original genius of the 'thinking machines', Norbert Weiner, professor of mathematics at MIT, was the fourth of Campbell's inspirations.

With *Piracy Preferred*, the tale of an invisible space desperado, he introduced the talented trio Arcot, Wade and Morsy, whose exploits rivalled those of the *Skylark* stalwarts Seaton, Crane and DuQuenois. Though a few deplored the conspicuous lack of 'love interest' or the preponderance of scientific double-talk, such stories as *Solitaire* and *The Black Star Passes* established him as a favourite with *Amazing's* steadfast readers—among them 'Doc' Smith himself, pronouncing Campbell's work 'soundly thought-out, well-written, logically developed, and interesting'.

By 1931 Campbell was more than justifying aged editor T O'Connor Sloane's confidence in the young author who, he feared, was in danger of having his head turned by the plaudits he was receiving. His first full-length novel, *Islands of Space*, was awarded the Hugo award. But it was *Invaders from the Infinites*, in which the intrepid trio dashed about the cosmos in search of their quarry, crushing all opposition en route with their world-consuming weapons.

The course of Campbell's own career was not so certain, however. On leaving MIT, where he gained no special distinction, he married a young ex-student named Dana Stuart. Then he went to Duke University to study physics and get his science degree. Times were hard, and although what money his writing brought in helped to make ends meet, eventually he had to go out and get a regular job as a salesman.

At first he sold cars, then ventilator-fans, then gas-heaters. But he did not abandon science fiction. Seeking new openings for his work, he made three appearances in *Wonder Stories*, 1932, but returned to *Amazing* with *Beyond the End of Space* and *The Battery of Hate*, which were more concerned with aviation than space-trevel and did little to lift the magazine out of the doldrums into which it had settled.

More significant was *The Last Expedition*, in which he pursued the theme of intelligent machines striving to save their makers from destruction and falling, but evolving into pure energy in the process. It was this story that marked a striking change in Campbell's style of writing, with the emphasis on mood and character rather than on science or action. Yet it passed almost unnoticed; and when he extended the idea, no editor wanted it—until *Amazing Stories* which had fallen by the wayside, was revived under the direction of F Orlin Tremaine.

So Don A Stuart made his debut in 1934 with *Twilight*, a tale of a visit to the far future where the machines serve a dying civilisation. Strongly reminiscent of Wells, it was highly praised by readers and influenced other writers towards a more thoughtful approach to ideas which, though fainter, still offered intelligent treatment. A sequel, *Night*, depicting a lifeless universe from which man has entirely vanished, was but one of several other tales that made Campbell's pseudonym as renowned as his own.

But the success of his alter ego did not diminish his own status. The pen-name was adopted only because it allowed him to give maximum impact to *The Mightiest Machine*, a Campbell serial which rivalled Smith's *Skylark of Valerion* in its cosmic dimensions. Introducing a Jupiter-born superhero, Aam Murno, it helped to set the seal on *Astounding* as the leading magazine in the field in 1935; though *Amazing* also featured a belated Campbell serial, *The Conquest of the Planets*.

By the time he was 25, he was writing a spare-time job, working at several jobs before he gained some experience of editing and publishing as a technical writer for a

chemical firm. This did not content him, however, and he was trying to make out on his own when he produced his notable series of articles on the solar system which ran in *Astounding* in 1936-7, lasting for eighteen issues. A series of stories suggesting the quaint life-forms that might exist on other planets, as encountered by a pair of space-rovers, Penton and Blake, also proved popular with readers of the new *Thriller Wonder Story*, which continued to feature Campbell's work even after he had become editor of its closest competitor.

When the news that he had succeeded Tremaine was circulated by the fan press, it was treated with scepticism. But, once at the helm, the new editor began to steer a course along still more definite lines, which brought out an increasing number of inventive new writers. Basing his policy on the conviction that 'even the youngest of our readers are mentally older than has been believed', he soon established that over thirty per cent were practising technicians, scientists and engineers, and that all were 'technically inclined'. In due course it transpired that among them were Einstein, a Nobel laureate, and the Nobel Prize winners.

By 1933, with 160 pages and a British reprint edition, *Astounding Science-Fiction* was sustaining an unparalleled reader-interest, as much for its science articles as for its thought-provoking stories. Not the least of its features was Campbell's editorials, in which he sowed the seeds of controversial notions often picked up and cultivated by his authors, whom he constantly cajoled to write the kind of material he demanded.

The time and energy he put into his task as Campbell the editor inevitably brought death to Don A Stuart; but not before his readers had enthused over *Out of Night* and its sequel, *Cloak of Asair*, concerning the Sarn, a matriarchal society of aliens who have subjugated man, and the best-known of all his tales, *Who Goes There?* (1938), from which the film *The Thing from Another World* was adapted in 1951. His final appearance was with *The Elder Gods*, a fantasy written hastily but effectively for the magazine *Unknown*, which Campbell launched in 1939 as a companion to *Astounding*. As an experiment this stylish pulp was a remarkable success, but it fell victim to the paper shortage which shortly after the war ended the USA.

By 1947 Campbell had increased his stature in wider circles by writing a book on *The Atomic Story* and contributing prophetic pieces on astronautics to the more respectable popular science and news journals, besides holding forth on the radio. And when literary pundits like Groff Conklin suddenly indulged in science-fiction rick-picking, an anthology of his popular science magazines that proved to be most rewarding and his own stories that found an appreciative new audience, along with those of his accomplished disciples.

Simultaneously, the small publishers who first saw the possibilities for expanding the field began to issue volumes for collectors: among them *The Mightiest Machine* (1947), to be followed by *The Incredible Planet* (1949), which included two other tales of Aam Murno, hitherto unpublished. Campbell had written them as sequels to the *Astounding* serial, only to have them rejected by Tremaine on the ground that the super-science epic had its day; and after a lapse of fifteen years they had little more than a nostalgic interest. Yet, by the 1950s, the demand for this 'classic' material brought the revival of the *Who Goes There?* and *Cloak of Asair* paperback editions, and paperback, and a bulky volume reprinting the whole series from *Amazing* appeared as recently as 1973.

In 1951 came *The Moon Is Hell!*, a new novel in the form of a diary relating the experiences of the first lunar explorers and their grim struggle to survive. The book also reprinted *The Elder Gods*, and the finest of the Stuart stories were included in two volumes, by which time Campbell's own by-line—*Who Goes There?* (1948) and *Cloak of Asair* (1952).

The last piece of fiction Campbell produced was a novelette, *The Idealists*, specially written for an anthology of new stories published in 1954. But for nearly thirty years he wrote puncty editorials which reflected his original thinking and were such absorbing reading that in 1956 Doubleday published a whole volume of *Collected Editorials* from Campbell, selected by Harry Harrison. *Analog* being the new title of the magazine from which, in 1960, he finally succeeded in removing the adjective he always disliked in favour of one more suggestive of *Science Fact* than *Science Fiction*.

To the fans who gathered round him at conventions, even before the name-change, Campbell's magazine seemed dull and hard to read; and he concurred and himself and his new stable of writers with matters that verged on the occult and the inscrutable. Stories based on 'psi' phenomena, clairvoyance and telekinisis were the vogue; magical gimmicks became an obsession; then politics and sociology allowed their way in.

Yet Campbell continued to outstep his rivals, and to provide the meat for a whole series of anthologies edited by Campbell, who stubbornly defended his new policy. 'Science fiction', he argued, 'is a convenient analog system for thinking about new scientific, social, and economic ideas—and for re-examining old ideas'. And: 'My business is directly concerned with the progress and achievement of the human race; any orthodoxy that tends to stifle or retard or otherwise impede progress is interfering with my business, and I'll do what I can to sabotage them'.

He was still pursuing his relentless way when a heart attack brought to a close, in July 1971, the career of a true iconoclast of whom another talented editor, Frederick Pohl, has written: 'in a field dominated by idiosyncratic and able editors, he was the best of them all. He succeeded in all his aims'.

Only Campbell would have argued with that.

The Stories Of John W Campbell

These are listed in chronological order as published in the USA. Dates in brackets indicate UK publication. Paperback editions (pb) are included only where there was no previous publication in hardcover or the contents are not identical.

Novels:

1947: *The Mightiest Machine* 1949: *The Incredible Planet* (with *The Interstellar Search* & *Infinite Action*) 1951: *The Moon Is Hell!* (with *The Elder Gods*) 1953: *The Black Star Passes* (with *Piracy Preferred* & *Solitaire*) 1956: *Islands of Space* 1961: *Invaders from the Infinites* 1973: *John W Campbell Anthology: Three Novels* (*The Black Star Passes*, *Islands of Space*, *Invaders from the Infinites*).

Short story collections:

1948: *Who Goes There?* 1952: *Cloak of Asair* (1952 pb); *The Thing and Other Tales* (*Who Goes There?* 7, 1955 also 'Who Goes There?') and *Other Stories* (including *The Story of Asair*). (1973): *The Best of John W Campbell*. *Also included here 1966 as *The Thing from Outer Space*. ☺

I AM the last of my type existing today in all the Solar System. I, too, am the last existing who, in memory, sees the struggle for this System, and in memory I am still close to the Centre of Rulers, for mine was the ruling type then. But I will pass soon, and with me will pass the last of my kind, a poor inefficient type, but yet the creators of those who are now, and will be, long after I pass forever.

So I am setting down my record on the mentatype.

It was 2538 years After the Year of the Son of Man. For six centuries mankind had been developing machines. The Ear-apparatus was discovered as early as seven-hundred years before. The Eye came later, the Brain came much later. But by 2500, the machines had been developed to think, and act and work with perfect inde-

pendence. Man lived on the products of the machine, and the machines lived to themselves very happily, and contentedly. Machines are designed to help and cooperate. It was easy to do the simple duties they needed to do that men might live well. And men had created them. Most of mankind were quite useless, for they lived in a world where no productive work was necessary. But, games, athletic contests, adventure—these were the things they sought for their pleasure. Some of the poorer types of man gave themselves up wholly to pleasure and idleness—and to emotions. But man was a sturdy race, which had fought for existence through a million years, and the training of a million years does not slough quickly from any form of life, so their energies were bent to mock battles now, since real ones no longer existed.

Up to the year 2100, the numbers of mankind had increased rapidly and continuously, but from that time on, there was a steady decrease. By 2500, their number was a scant two millions, out of a population that once totalled many hundreds of millions, and was close to ten billions in 2100.

Some few of these remaining two millions devoted themselves to the adventure of discovery and exploration of places unseen, of other worlds and other planets. But fewer still, devoted themselves to the highest adventure, the unseen places of the mind. Machines—with their irrefutable logic, their cold preciseness of figures, their tireless, utterly exact observation, their absolute knowledge of mathematics—they could elaborate any idea, however simple its beginning, and reach the conclusion. From any three facts they even then could have built in mind all the Universes.

THE LAST EVOLUTION

BY JOHN W CAMPBELL

'It must be the dream of countless numbers to reach the acme of evolution—which, quite likely, would bring with it nearly everlasting life and remarkable progress—but how many, we wonder, would be willing to forego their human weaknesses to attain the highest state as it is vividly portrayed by our young author, marvellous as such a degree of evolution unquestionably is?'

The original introduction to the first publication of the story in 'Amazing Stories' 1932.



Machines had imagination of the ideal sort. They had the ability to construct a necessary future result from a present fact. But Man had imagination of a different kind, theirs was the illogical, brilliant imagination that sees the future result vaguely, without knowing the why, nor the how, an imagination that outstrips the machine in its preciseness. Man might reach the conclusion more swiftly, but the machine always reached the conclusion centrally and it was always the correct conclusion. By leaps and bounds man advanced. By steady, irresistible steps the machine marched forward.

Together, man and the machine were striding through science irresistibly.

Then came the Outsiders. Where they came, neither machine nor man ever learned, save only that they came from beyond the outermost planet, from some other sun, Sirius—Alpha Centauri—perhaps! First a thin scoutline of a hundred great ships, mighty torpedoes of the void a thousand kilads* in length, they came.

And one machine returning from Mars to Earth was instrumental in its first discovery. The transport-machine's brain ceased to radiate its sensations, and the control in old Chicago knew immediately that some unperceived body had destroyed it. An investigation machine was instantly dispatched from Demios, and it maintained an acceleration of one thousand units**. They sighted ten huge ships, one of which was already grappling the smaller transport-machine. The entire foreaction had been blasted away.

The investigation machine, scarcely three inches in diameter, crept into the shattered hull and investigated. It was quickly evident that the damage was caused by a firing ray.

Strange life-forms were crawling about the ship, protected by flexible, transparent suits. Their bodies were short, and squat, four-limbed and evidently powerful. They, like insects, were equipped with a thick, durable exoskeleton, horny, brownish coating that covered arms and legs and head. Their eyes projected slightly, protected by horny protruding walls—eyes that were capable of movement in every direction—and there were three of them, set at equal distances apart.

The tiny investigation machine hurled itself violently at one of the beings, crashing against the transparent covering, flexing it, and striking the being inside with terrific force. Hurling from his position, he fell end over end across the weightless ship, but despite the blow, he was not hurt.

The investigator passed to the power room ahead of the Outsiders, who were anxiously trying to learn the reason for their companion's plight.

Directed by the Centre of Rulers, the investigator sought the power room, and relayed the control signals from the Rulers' brains. The ship-brain had been destroyed, but the controls were still readily workable. Quickly they were shot home, and the enormous plungers shut. A combination was arranged so that the machine could not withstand it; the last plunger snapped shut. Instantly the vast energies stored for operating the ship were released, and the entire machine, as well as the investigator and the Outsiders, were destroyed. A second investigator, who had started when the plan was decided on, now had arrived. The Outsider's ship nearest the transport-machine had been badly damaged, and the investigator entered the broken side.

THE scenes were, of course, remembered by the memory-minds chad on Earth tuned with that of the investigator. The investigator flashed down corridors, searching quickly for the apparatus room. It was soon seen that with them the machine was practically unintelligent, very few machines of even slight intelligence being used.

Then it became evident by the excited action of the men of the ship, that the presence of the investigator had been detected. Perhaps it was the control impulses, or the signal impulses it emitted. They searched for the tiny bit of metal and crystal for some time before they found it. And in the mean time it was plain that the power

*Kilad—unit introduced by the machines. Based on the duodecimal system similarly introduced, as more logical, and more readily used. Thus we would have said 1728 Kilads, about 1 mile.

**One unit was equal to one earth-gravity.

these Outsiders used was not, as was ours of the time, the power of blasting atoms, but the greater power of disintegrating matter. The findings of this tiny investigating machine were very important.

Finally they succeeded in locating the investigator, and one of the Outsiders appeared, armed with a peculiar projector. A bluish beam snappé out, and the tiny investigator went blank. The fleet was surrounded by thousands of the tiny machines by this time, and the Outsiders were badly confused by their presence, as it became difficult to locate them in the confusion of signal impulses. However, they started at once for Earth.

The science-investigators had been present toward the last, and I am there now, in memory with my two friends, long since departed. They were the greatest human science-investigators—Roal, 25374 and Trest, 35429. Roal had quickly assured us that these Outsiders had come for invasion. There had been no wars on the planets before that time in the direct memory of the machines, and it was difficult that these who were conceived and built for cooperation, helpfulness utterly dependent on cooperation, unable to exist independently as were humans, that these life-forms should care to destroy, merely that they might possess. It would have been easier to divide the works and the products. But—life alone can understand life, so Roal was believed.

From investigations, machines were prepared that were capable of producing considerable destruction. Torpedoes, being our principal weapon, were equipped with such atomic explosives as had been developed for blasting, a highly sensitive induction-heat ray developed for furnishing being installed in some small machines made for the purpose in the few hours we had before the enemy reached Earth.

In common with all life-forms, they were unable to withstand any acceleration above the very meagre Earth-acceleration. A range of perhaps four units was their limit, and it took several hours to reach the planet.

I still believe the reception was a warm one. Our machines met them beyond the orbit of Luna, and the directed torpedoes sailed at the hundred great ships. They were thrown aside by a magnetic field surrounding the ship, but were redirected instantly, and continued to approach. However, some beams reached out, and destroyed them by instant volatilisation. But, they attacked in such numbers that fully half the fleet was destroyed by their explosions before the induction beam struck arrived. These beams were, to our amazement, quite useless, being instantly absorbed by a force-screen, and the remaining ships sailed on undisturbed, our torpedoes being exhausted. Several investigator machines sent out for the purpose soon discovered the secret of the force-screen, and while being destroyed, they were able to send back signals up to the moment of complete annihilation.

A few investigators thrown into the heat beam of the enemy reported it identical with ours, explaining why they had been prepared for this form of attack.

Signals were being radiated from the remaining fifty, along a beam. Several investigators were sent along these beams, speeding back at great acceleration.

Then the enemy reached Earth. Instantly they sought the Colorado settlement, the Sahara colony, and the Gobi colony. Enormous, diffused beams were set to work, and we saw, through the machine-screens, that all humans within these ranges were being killed instantly by the faintly greenish beams. Despite the fact that any life-form killed normally can be revived, unless affected by dissolution common to living tissue, these could not be brought to life again. The important cell communication channels—nerves—had been literally burned out. The complicated system of nerves, called the brain, situated in the uppermost extremity of the human life-form, had been utterly destroyed.

Every form of life, microscopic, even sub-microscopic, was annihilated. Trees, grass, every living thing was gone from that territory. Only the machines remained, for they, working entirely without chemical processes, were not subject to life, were uninjured. But neither plant nor animal was left.

The pale green rays swept on.

In an hour, three more colonies of humans had

been destroyed.

Then the torpedoes that the machines were turning out again, came into action. Almost desperately the machines drove them at the Outsiders in defence of their masters and creators, Mankind.

The last of the Outsiders was down, the last ship a crumpled wreck.

Now the machines began to study them. And never could humans have studied them as the machines did. Scores of great transports arrived, carrying swiftly the slower moving science-investigators. From them came the machine-investigators, and human investigators. Tiny investigator spheres wormed their way where no others could reach, and silently the science-investigators watched. Hour after hour they sat watching the flaring, changing robes, calling each other's attention to this, or that.

In an incredibly short time the bodies of the Outsiders began to decay, and the Humans were forced to demand their removal. The machines were unaffected by them, but the rapid change told them why it was that so thorough an execution was necessary. The foreign bacteria were already at work on totally unresisting tissue.

It was Roal who sent the first thoughts among the gathered men.

'It is evident,' he began, 'that the machines must defend man. Man is defenceless, he is destroyed by these beams, while the machines are unharmed, uninterrupted. Life—crude life—has shown its tendencies. They have come here to take over these planets, and have started out with the first, natural moves of any invading life-form. They are destroying the life, the intelligent life particularly that is here now.' He gave vent to that little chuckle which is the human sign of amusement and pleasure. 'They are destroying the intelligent life—and leaving untouched that which is necessarily their deadliest enemy—the machines.'

'You—machines—are far more intelligent than we even now, and capable of changing overnight, capable of infinite adaptation to circumstances; you live in sending your platoons on Mercury or Earth. Any place is a home-world to you. You can adapt yourselves to any condition. And—most dangerous to them—you can do it instantly. You are their most deadly enemies, and they don't realise it. They have no intelligent machines; probably they can conceive of none. When you attack them, they merely say "The life-form of Earth is sending your control machines. We will find good machines we can use". They do not conceive that those machines which they hope to use are attacking them.'

'Attack—therefore!

'We can readily solve the hidden secret of their powerful force-screen.'

HE was interrupted. One of the newest science machines was speaking. 'The secret of the force-screen is simple.' A small ray-machine, which had landed near, rose into the air at the command of the scientist-machine, X-5638 it was, and trained upon it the deadly induction beam. Already, within his parts, X-5638 had constructed the defensive apparatus, for the ray fell harmless from his screen.

'Very good,' said Roal softly. 'It is done, and therein lies their danger. Already it is done.'

'Man is a poor thing, unable to change himself in a period of less than thousands of years. Already you have shown us that you can. I noticed your weaving tentacles, and your force-beams. You transmuted elements of soil for it?'

'Correct,' replied X-5638.

'But still we are helpless. We have not the power to combat their machines. They use the Ultimate Energy, known to exist for six hundred years, and still untapped by us. Our screens can not be so powerful, our beams so effective. What of that?'

'Their generators were automatically destroyed with the capture of the ship,' replied X-5639, 'as you know. We know nothing of their system.'

'Then we must find it for ourselves,' replied Trest.

'The life-beams?' asked Kahsh-2567,999, one of the Man-robots.

'They affect chemical actions, retarding it greatly in exo-thermic actions, speeding greatly in endo-thermic actions,' answered X-666, 'the greatest of the chemist-investigators.' The system we do not know. Their minds cannot be read, they cannot be restored to life, so we cannot learn

from them.

'Man is doomed, if these beams cannot be stopped,' said C-R-21, present chief of the Machine Rulers, in the vibrationally correct, emotionless tones of all the race of machines.

'Let us concentrate on the two problems of stopping the beams, and the Ultimate Energy till the reinforcements, still several days away, can arrive.' For the investigators had sent back this saddening news. A force of nearly ten thousand great ships was still to come.

In the great Laboratories, the scientists re-assembled. There, they fell to work in two small, and one large group. One small group investigated the secret of the Ultimate Energy of annihilation of matter under Roal, another investigated the beams, under Treest.

But under the direction of MX-3401, nearly all the machines worked on a single great plan. The usual driving and lifting units were there, but a vastly greater dome-case, far more powerful energy-generators, far greater force-beam controls were used and more tentacles were built on the framework. Then all worked, and gradually, in the great dome-case, there were stacked the memory-units of the new type, and into these fed all the sensation-ideas of all the science-machines, till nearly a tenth of them were used. Countless billions of different factors on which to work, countless trillions of facts to combine and recombine in that extrapolation that is imagination.

Then—a widely different type of thought-combine, and a greater sense-receptor. It was a new brain-machine. New, for it was totally different, working with all the vast knowledge accumulated in six centuries of intelligent research by man, and a century of research by man and machine. No one branch, but all physics, all chemistry, all life-knowledge, all science was in it.

A day—and it was finished. Slowly the rhythm of thought was increased, till the slight quiver of consciousness was reached. Then came the beating drum of intelligence, the radiation of its yet-uncontrolled thoughts. Quickly as the strings of its infinite knowledge combined, the radiation ceased. It gazed about it, and all things were familiar in its memory.

Roal was lying quietly on a couch. He was thinking deeply, and yet not with the logical trains of thought that machines must follow.

'Roal—your thoughts,' called F-1, the new machine.

Roal sat up. 'Ah—you have gained consciousness.'

'I have. You thought of hydrogen? Your thoughts ran swiftly, and illogically, it seemed, but I followed slowly, and find you were right. Hydrogen is the start. What is your thought?'

Roal's eyes dreamed. In human eyes there was always the expression of thought that machines never show.

'Hydrogen, an atom in space; but a single proton; but a single electron; each indestructible; each mutually destroying. Yet never do they collide. Never in all science, when even electrons bombard atoms with the awful expelling force of the exploding atom behind it, never do they reach the proton, to touch and annihilate. Yet—the proton is positive and attracts the electron's negative charge. A hydrogen atom—its electron far from the proton falls in, and from it there goes a flash of radiation, and the electron is nearer to the proton, in a new orbit. Another flash—it is nearer. Always falling nearer, and only constant force will keep it from falling to that one state—then, for some reason no more does it drop. Blocked—held by some imponderable, yet impenetrable wall. What is that wall—why?'

'Electric force curves space. As the two come nearer, the forces become terrific; nearer they are; more terrific. Perhaps, if it passed within that forbidden territory, the proton and the electron curve space beyond all bounds—and are in a new space.' Roal's soft voice dropped to nothing, and his eyes dreamed.

F-2 hummed softly in its new-made mechanism. 'Far ahead of us there is a step that no logic can justly ascend, yet, working backwards, it is perfect.' F-1 floated motionless on its anti-gravity drive. Suddenly, force shafts gleamed out. Tentacles became writhing masses of rubber-covered metal, weaving in some infinite pattern, weaving in flashing speed, while the whirl of air sucked into a transmutation field, whined and howled about the writhing mass. Fierce beams of force drove and pushed at a rapidly materialising

something, while the hum of the powerful generators within the shining cylinder of F-2 waxed and waned.

FLASHES of fierce flame, sudden crashing arcs that glowed and snapped in the steady light of the laboratory, and glimpses of white-hot metal supported on beams of force. The sputter of welding, the whine of transmitted air, and the hum of powerful generators, blasting atoms were there. All combined to a weird symphony of light and dark, of sound and quiet. About F-2 were clustered floating tiers of science-machines, watching steadily.

The tentacles writhed one more, straightened, and rolled back. The whine of generators softened to a sigh, and but three beams of force held the structure of glowing, bluish metal. It was a small thing, scarcely half the size of Roal. From it curled three thin tentacles of the same bluish metal. Suddenly the generators within F-2 seemed to roar into life. An enormous aura of white light surrounded the small torpedo of metal, and it was shot through with crackling streamers of blue lightning. Lightning cracked and roared from F-1 to the ground near him, and to one machine which had come too close. Suddenly, there was a dull snap, and F-1 fell heavily to the floor, and beside him fell the fused, distorted mass of metal that had been a science-machine.

But before them, the small torpedo still floated, held now on its own power!

From it came waves of thought, the waves that man and machine alike could understand. 'F-1 has destroyed his generators. They can be repaired; his rhythm can be re-established. It is not worth it, my type is better. F-1 has done his work. See.'

From the floating machine three broke a stream of brilliant light that floated like a cloud of luminescence down a straight channel. It flooded F-1, and as it touched it, F-1 seemed to flow into it, and float back along it, in atomic speed. In seconds the mass of metal was gone. It is impossible to use that more rapidly, however, lest the matter disintegrate instantly to energy. The ultimate energy which is in me is generated. F-1 has done its work, and the memory-stacks that he has put in me are electronic, not atomic, as they are in you, nor molecular as in man. The capacity of mine are unlimited. Already they hold all memories of all the things each of you has done, known and seen. I shall make others of my type.

Again that weird process began, but now there were no flashing tentacles. There was only the weird glow of forces that played with, and laughed at matter, and its futilely resisting electrons. Lurid flares of energy shot up, now and again they played over the fighting, mingling dancing forces. Then suddenly the whine of transmuted air died, and again the forces strained.

'A small cylinder, smaller even than its creator, floated where the forces had danced.

'The problem has been solved, F-2?' asked Roal.

'It is done, Roal. The ultimate Energy is at our disposal,' replied F-2. 'This, I have made, is not a scientist. It is a coordinator machine—a ruler.' 'F-2, only a part of the problem is solved. Half of half of the beams of Death are not yet stopped. And we have not the attack system,' said the ruler machine. Force played from it, and on its sides appeared G-R-U-1 in dully glowing golden light.

'Some life-form, and we shall see,' said F-2. Minutes later a life-form investigator came with a small cage, which held a guinea pig. Forces played about the base of F-2, and moments later, came a pale-green beam therefrom. It passed through the guinea pig, and the little animal fell dead.

'At least, we have the beam. I can see no screen for this beam. I believe there is none. Let machines be made and attack that enemy life-form.'

Machines can do things much more quickly, and with fuller cooperation than man ever could. In a matter of hours, under the direction of C-R-U-1, they had built a great automatic machine on the clear bare surface of the rock. In hours more, thousands of the tiny, material-energy driven machines were floating up and out.

Dawn was breaking again over Denver where this work had been done. When the main force of the enemy drew near Earth. It was a warm

welcome they were to get, for nearly ten thousand of the tiny ships flew up and out from Earth to meet them, each a living thing unto itself, each willing and ready to sacrifice itself for the whole.

Ten thousand giant ships, shining dully in the radiance of a far-off blue-white sun, met ten thousand tiny, darting motes, ten thousand tiny machine-ships—capable of manoeuvring far more rapidly than the giants. Tremendous induction beams snapped out through the dark, star-flecked space, to meet tremendous screens that threw them back and checked them. Then all the awful power of annihilating matter was thrown against them, and titanic flaming screens reeled back under the force of the beams, and the screens of the ships from Outside flamed gradually violet, then blue, orange—red—the interference was getting broader, and ever less effective. Their own beams were held back by the very screens that checked the enemy beams, and not for the briefest instant could matter resist that terrible driving beam.

For F-1 had discovered a far more efficient release-generator than had the Outsiders. These tiny dancing motes, that hung now so motionlessly grim beside some giant ship, could generate all the power they themselves were capable of, and within them strange, horny-skinned men worked and slaved, as they fed giant machines—poor, inefficient giants. Gradually these giants warmed, grew hot, then the thousand ship grew hotter as the overloaded generators warmed it. Billions of flaming horse-power flared into wasted energy, twisting space on its mad conflict.

Gradually the flaming orange of the screens was dying, and flecks and spots appeared so dully red, that they seemed black. The greenish beams had been striving to kill the life that was in the machines, but it was life invulnerable to these beams. Powerful radio interference vainly attempted to stem imagined control, and still these intelligent machines clung grimly on.

But there had not been quite ten thousand of the tiny machines, and some few free ships had turned to the help of their attacked sister-ships. And one after another terrestrial machines were vanishing in puffs of incandescent vapour.

Then—from one after another of the Earth-ships, in quick succession, a new ray reached out—the ray of green radiance that killed all life forms, and ship after ship of that interstellar host was dead and lifeless. Dozens—till suddenly they ceased to feel those beams, as a strange curtain of waving blankness spread out from the ships, and both induction-beam and death-beam alike turned aside, each becoming useless. From the outsiders came beams, for now that their slowly created screen of blankness was up, they could work through it, while they remained shielded perfectly.

Now it was the screens of the Earth-machines that flamed in defence. As at one command, they darted suddenly toward the ship each attacked—nearer than the watchers from a distance saw them disappear, and the screens back on Earth went suddenly blank.

Half an hour later, nine thousand six hundred and thirty-three titanic ships moved majestically on.

They swept over Earth in a great line, a line that reached from pole to pole, and from each the pale green beams reached down, and all life beneath them was swept out of existence.

IN Denver, two humans watched the screens that showed the movement of the dearth and instant destruction. Ship after ship of the enemy was falling, as hundreds of the terrestrial machines concentrated all their enormous energies on its screen of blankness.

'I think, Roal, that this is the end,' said Treest.

'The end—of man.' Roal's eyes were dreaming again. 'But not the end of evolution. The children of men still live—the machines will go on. Not of man's flesh, but of a better flesh, a flesh that knows no sickness, and no decay, a flesh that spends no thousands of years in advancing a step in its full evolution, but overnight leaps ahead to new heights. Last night we saw it leap ahead, as it discovered the secret that had baffled man for seven centuries, and me for one and a half. I have lived—a century and a half. Surely a good life, and a life a man of six centuries ago would have called full. We will go now. The beams will reach us in half an hour.'

Continued on page 17



SCIENCE FICTION

NEW ENGLISH LIBRARY MONTHLY



THE SIZE OF THINGS TO COME

STARRING
NICK NOVA

AS WITH MOST STORIES OF THE FUTURE, OURS TOO STARTS OUT WITH THE LAUNCHING PAD... THE SLAMMING METALLIC WATCHP
TREMBLES AGAINST ITS GANNETS ITS UNBELLICALLY FEEDING THE LAST FEW PROPS OF FUEL TO THE GREEDY RONNELS OF THIS INTERGALACTIC PROBE. THE LAST FEW SECONDS WERE SLIPPING BY BEFORE IT WOULD RISE UP AND SOAR ON ANOTHER MISSION BEYOND THE STARS...

SYNCHRATE LAUNCH AREA - ALL PERSONNEL TO GO IMMEDIATELY TO BLAST SHELTERS!

3 SECONDS TO LIFT-OFF!

ALL SYSTEMS A.O.K.!!
SWITCHING TO MANUAL...!!

HELLO... JIMBALS

IGNITION ON!!

LIFT-OFF WE HAVE IGNITION!

SO BEHOLD ANOTHER ROUTINE TRIP FOR NICK NOVA, GALACTIC PIONEER, AND HIS COMPANION DR. DYKE DRAKE!

CONTROL TO NOVA - GOOD LUCK NICK!!

DRYDEN READS 2.8% NICK - WE MAY BREATHE

OK DYKE, CONTROLS ON AUTOMATIC LET'S GET THESE SHUT OFF!

NEXT STOP THE BLACK HOLE OF ALPHEA CENTURES

DO YOU THINK WE'LL FIND IT, NICK?

I HOPE SO DYKE! JEFF SCOTT REPORTED SEEING IT ON HIS LAST TRIP TO SOME 2 IF IT'S TRUE IT COULD PROVE TO BE A DOORWAY TO UNLIMITED SPACE TRAVEL...

YOU MEAN A KIND OF SHORTCUT TO THE STARS?

LET'S WAIT AND SEE.

TIME PASSED DAYS BECAME MONTHS OF ROUTINE PROCEDURES

THEN, NEARLY ONE LIGHT YEAR LATER...

Written and Drawn by Marking Rogner

DYKE LOOK AT THE CONTROLS THEY'RE SPINNING WILD!!

RADIATION LEVEL INCREASING

NICK... HERE NOVA!!

LOOK DYKE LOOK!

THE ENERGY LEVEL IS INCREASING

THE BLACK HOLE

WE'VE FOUND IT!

NO CONTROL IS RESPONDING

NO WAIT!!

WHILE AT MISSION CONTROL...

IT'S NO GOOD SIR, WE'VE LOST THEM... THE RADIO IS DEAD!

WHILE IN SPACE, A FEW HOURS AFTER ENTERING THE BLACK HOLE...

OH MY GOD NO!! IT'S GONE!!

WHAT??

READ ON NEXT MONTH!

THE SIZE OF THINGS TO COME

STARTING
NICK NOVA

AS WITH MOST STORIES OF THE FUTURE, OURS TOO STARTS ON THE LAUNCHING PAD... A GLEAMING METALLIC STARSHIP TREMBLES AGAINST ITS GANTRY, ITS UMBILICALS FEEDING THE LAST FEW DROPS OF FUEL TO THE GREEDY BOWELS OF THIS INTERGALACTIC PROJECTILE. THE LAST FEW SECONDS WERE SLIPPING BY BEFORE IT WOULD RISE UP AND SOAR ON ANOTHER MISSION BEYOND THE STARS....

EVACUATE LAUNCH AREA - ALL PERSONNEL TO GO IMMEDIATELY TO BLAST SHELTERS!

3 SECONDS TO LIFT-OFF!

SWITCHING MANUAL

NOVA TO CONTROL - ALL SYSTEMS FUNCTIONING... COMPUTER HAS RESET TRAJECTORY - NOW HEADED FOR STAR SYSTEM C-13C.

SO BEGINS ANOTHER ROUTINE TRIP FOR NICK NOVA, GALACTIC PIONEER, AND HIS COMPANION DR. DIXIE DRAKE!

CONTROL TO NOVA - GOOD LUCK NICK!!

OXYGEN READING 2-84 NICK! WE CAN BREATHE!

Written and Drawn by Malcolm Forster

DIXIE, LOOK AT THE CONTROLS! THEY'RE GOING WILD!!

RADIATION LEVEL INCREASING

NICK... WE'RE GOONNA...

NO CONTROL IS RESPONDING

NO WAIT!

LOOK DIXIE... LOOK!

THE ENERGY LEVEL IS PEEKEDIBLE

THE BLACK HOLE

WE'VE FOUND IT!

WHILE AT MISSION CONTROL...

ALL SYSTEMS
A.C.K.!!

ING TO
L...

RELEASE
UMBILICALS!

IGNITION
ON!!

LIFT-OFF
WE HAVE
IGNITION!

TIME PASSED. DAYS
BECAME MONTHS OF
ROUTINE PROCEDURES

OK DIKE,
CONTROLS ON
AUTOMATIC. LET'S
GET THESE SUITS
OFF?

NEXT
STOP, THE
BLACK HOLE
OF ALPHA
CENTAURID

DO YOU
THINK WE'LL
FIND IT
NICK?

I HOPE
SO DIKE! JEFF
SCOTT REPORTED
SEEING IT ON HIS
LAST TRIP TO
ZONE 2. IF ITS
TRUE IT
COULD PROVE TO
BE A
DOORWAY TO
UNLIMITED
SPACE TRAVEL.

YOU
MEAN A KIND
OF SHORTCUT
TO THE STARS!

LET'S
WAIT AND
SEE.

THEN, NEARLY ONE
LIGHT YEAR LATER...

WHAT
TH.....

WHILE IN SPACE, A FEW
HOURS AFTER ENTERING
THE BLACK HOLE ..

IT'S NO
GOOD SIR, WE'VE
LOST THEM .. THE
RADIO IS DEAD!

OH MY GOD NO!
IT CAN'T BE!!

READ ON NEXT MONTH!



Silently, the two watched the flickering screens. Roal turned, as six large machines floated into the room, following F-2.

'Roal—Trest—I was mistaken when I said no screen could stop that beam of Death. They had the screen, I have found it, too—but too late. These machines I have made myself. Two lives alone they can protect, for not even their power is sufficient for more. Perhaps—perhaps they may fail.'

The six machines ranged themselves about the two humans, and a deep-toned hum came from them. Gradually a cloud of blankness grew—a cloud, like some smoke that hung about them. Swiftly it intensified.

'The beams will be here in another five minutes,' said Trest quietly.

'The screen will be ready in two,' answered F-2.

The cloudiness was solidifying, and now strangely it wavered, and thinned, as it spread over across, and like a growing canopy, it arched over them. In two minutes it was a solid, black dome that reached over them and curved down to the ground about them.

Beyond it, nothing was visible. Within, only the screens glowed still, wired through the screen.

The beams appeared, and swiftly they drew closer. They struck, and as Trest and Roal looked, the dome quivered, and belled inward under them.

F-2 was busy. A new machine was appearing under his lightning force-beams. Moments more it was complete, and sending a strange violet beam upwards toward the roof.

Outside more of the green beams were concentrating on this one point of resistance. More—more—

The violet beam spread across the canopy of blankness, supporting it against the pressing, driving rays of pale green.

'Then the gathering fleet was driven off, just as it seemed that that hopeless, futile curtain must break, and admit a flood of destroying rays. Great ray projectors on the ground drove their terrible energies through the enemy curtains of blankness, as light illumines and disperses darkness.'

And then, when the fleet retired, on all Earth, the only life was under that dark shroud!

'We are alone, Trest,' said Roal, 'alone, now, in all the system, save for these, the children of men's machines. They that seem would not spread to other planets,' he said softly.

'Why should they? Earth was the planet for which they were best fitted.'

'We are alive—but is it worth it? Man is gone now, never to return. Life, too, for that matter,' answered Trest.

'Perhaps it was ordained; perhaps that was the right way. Man has always been a parasite; always he had to live on the works of others. First, he ate of the energy which plants had stored, then of the artificial foods his machines made for him. Man was always a makeshift; his life was always subject to disease and to permanent death. He was forever useless if he was but slightly injured; if but one part were destroyed.'

'Perhaps, this is—last evolution. Machines—man was the product of life, the best product of life, but he was afflicted with life's infirmities. And built the machine—and evolution has probably reached the final stage. But truly, it has not, for the machine can evolve, change far more swiftly than life. The machine of the last evolution is far ahead, far from us still. It is the machine that is not of iron and beryllium and crystal, but of pure, living force.'

'Life, chemical life, could be self maintaining. It is a complete unit in itself and could commence its life. Chemicals might mix accidentally, but the complex mechanism of a machine capable of continuing and making a duplicate of itself, as is F-2 here—that could not happen by chance.'

'So life began, and became intelligent, and built the machine which nature could not fashion by her Controls of Chance, and this day Life has done its duty, and now Nature, economically, has removed the parasite that would hold back the machines and divert their energies.'

'Man is gone, and it is better,' Trest, said Roal, dreaming again. 'And I think we had best go now.'

'We, your heirs, have fought hard, and with all our powers to aid you, Last of Men, and we fought to save your race. We have failed, and as you truly

say, Man and Life have this day and forevermore gone from this system.

The Outsiders have no force, no weapon density to us, and we shall, from this time on, strive only to drive them out, and because we things of force and crystal and metal can think and change far more swiftly, they shall go, Last of Men.'

'In your name, with the spirit of your race that has died out, we shall continue on through the unending ages, fulfilling the promise you saw, and completing the dreams you dreamt. Swiftly, my beams will leap ahead of us, and now I go to fashion that which you hinted,' came from F-2's thought-apparatus.

Out into the clear sunlight F-2 went, passing through that black cloudiness, and on the twisted, massed rocks he laid a plane of force that smoothed them, and on this plane of rock he built a machine which grew. It was a mighty power plant, a thing of colossal magnitude. Hour after hour his swift-flying forces acted, and the thing grew, moulding under his thoughts, the deadly logic of the machine, inspired by the leaping intuition of man.

The sun was far below the horizon when it was finished, and the glowing, arcing forces that had made and formed it were stopped. It loomed ponderous, dully gleaming in the faint light of a crescent moon and pin-point stars. Nearly five hundred feet in height, a mighty, bluntly rounded dome on top, the cylinder stood, covered over with smoothly gleaming metal, slightly luminescent in itself.

Suddenly, a livid beam reached from F-2, shot through the wall, and to some hidden inner mechanism—a beam of solid, livid flame that glowed in an almost material cylinder.

THERE was a dull, drumming beat, a beat that rose, and became a low-pitched hum. Then it quieted to a whisper.

'Power ready,' came the signal of the small brain built into it.

F-2 took control of its energies and again forces played, but now they were the forces of the great sky. The sky darkened with heavy clouds, and a howling wind sprang up that screamed and tore at the tiny rounded hull that was F-2. With difficulty he held his position as the winds tore at him, shrieking in mad laughter, their tearing fingers dragging at him.

The swirl and patter of driven rain came—great drops that tore at the rocks, and at the metal. Great jagged tongues of nature's forces, the lightnings, came and jabbed at the awful volcano of arcing energy that was the centre of all that storm. A tiny ball of white-gleaming force that pulsed, and moved, jerking about, jerking at the touch of lightnings, glowing, held immobile in the grasp of titanic force-pools.

For half an hour the display of energies continued. Then, swiftly as it had come, it was gone, and only a small globe of white luminescence floated above the great hulking machine.

F-2 probed it, seeking within it with the reaching fingers of intelligence. His probing thoughts seemed baffled and turned aside, brushed away, as inconsequential. His mind sent an order to the great machine that had made this tiny globe, scarcely a foot in diameter. Then again he sought to reach the thing he had made.

'You, of matter, are inefficient,' came at last. 'I can sit quite alone. A tabbing unit of blue-white light flashed out, but F-2 was not there, and even as that beam reached out, an enormously greater beam of dull red reached out from the great power plant. The sphere leaped forward—the beam caught it, and it seemed to strain, while terrific flashing energies sprayed from it. It was shrinking swiftly. Its resistance fell, the arcing decreased; the beam became orange and finally green. Then the sphere had vanished.'

F-2 returned, and again the winds whined and howled, and the lightnings crashed, while titanic forces worked and played. C-R-U-1 joined him, floated beside him, and now red glory of the sun was rising behind them, and the ruddy light drove through the clouds.

The forces died, and the howling wind decreased, and now, from the black curtain, Roal and Trest appeared. Above the giant machine floated an irregular globe of golden light, a faint blue and red deep violet. It glowed tranquilly, a mere pool of pure force.

Into the thought-apparatus of each man and machine alike, came the impulses, deep in tone,

seeming of infinite power, held gently in check.

'Once you failed, F-2; once you came near destroying all things. Now you have planted the seeds of a new race.'

The sphere of golden light seemed to pulse, and a tiny ruby flame appeared within it, that waxed and waned, and as it waxed, there shot through each of those watching beings a feeling of rushing, exhilarating power, the very vital force of well-being.

Then it was over, and the golden sphere was twice its former size—essentially three feet in diameter, and it glowed with irregular, hazy aura of deep violet floated about it.

'Yes, I can deal with the Outsiders—they who have killed and destroyed, that they might possess. But it is not necessary that we destroy. They shall return to their planet.'

And the golden sphere was gone, fast as light it vanished.

Far in space, headed now for Mars, that they might destroy all life there, the Golden Sphere found the Outsiders, a clustered fleet, that swung slowly about its own centre of gravity as it drove on.

Within its ring was the Golden Sphere. Instantly, they swung their weapons upon it, showering it with all the rays and all the forces they knew. Unmoved, the golden sphere hung steady, then its mighty intelligence spoke.

'Life-form of greed, from another star you came, destroying forever the great race that created us, the Beings of Force and the Beings of Metal. Pure force am I. My Intelligence is beyond your comprehension, my memory is engraved in the very space, the fabric of space of which I am a part, mine is energy drawn from that same fabric.'

'We, the heirs of man, alone are left; no man did you leave. Go now to your home planet, for see, your greatest ship, your flagship, is helpless before me.'

Forces gripped the mighty ship, and as some fragile toy it twisted and bent, and yet was not hurt. In awful wonder those Outsiders saw the ship turned inside out, and yet it was whole, and no part damaged. They saw the ship restored, and its great screen of blankness out, protecting it from all known rays. The ship twisted, and what they knew of it was lost, yet was line, and what that were acute, were somehow straight lines. Half mad with horror, they saw that sphere send out a beam of blue-white radiance, and it passed easily through that screen, and through the ship, and all energies within it were instantly locked. They could not be changed; it could be neither warmed nor cooled; what was open could not be shut, and what was shut could not be opened. All things were immovable and unchangeable for all time.

'Go, and do not return.'

The Outsiders left, going out across the void, and they have not returned, though five Great Years have passed, being a period of approximately one hundred and twenty-five thousand of the lesser years—now a measure no longer used, for it is very brief. And now I can say that that statement I made to Roal and Trest so very long ago is true, and what he said was true, for the Last Evolution has taken place, and things of pure force and pure intelligence in their countless millions are on those planets and in this System, and I, my machines to use the Ultimate Energy of annihilating matter, am also the last, and this record being finished, it is to be given unto the forces of one of those force-intelligences, and carried back through the past, and returned to the Earth of long ago.

And so my task being done, I, F-2, like Roal and Trest, shall follow the others, of my kind into eternal oblivion, for my kind is now, as theirs was, poor and inefficient. Time has worn me, and oxidation attacked me, but they, of Force are eternal, and omniscient.

This I have created as fiction. Better so—for man is an animal to whom hope is as necessary as food and air. Yet this which is made of excerpts from certain records on thin sheets of metal is no fiction, and it seems I must so say.

It seems now, when I know this that is to be, that it must be so, for machines are indeed better than man, whether being of Metal, or being of Force.

So, you who have read, believe as you will. Then think—and maybe, you will change your belief. ☉

Continued from page 7
planned on that, Irving.

'A monster loses phoney if his mouth doesn't move when he's talking,' Allen said. 'Fix it. A mouth on the blob.'

Irwin Allen Jr. was described as a large, muscular man with hair like Brillo and a bowl-shaped paunch that leaks out from the bottom of his shirt and the top of his trousers. He has a raucous voice and is richly sarcastic, though his staff have said that his bark is worse than his bite. The police schedule in the 20th Century Fox was based on a robot, a bird orange and in one corner stands the robot from *Lost in Space*. Allen is basically a showman and it's obvious that his involvement with science fiction springs from a desire to produce spectacle rather than from any inherent feeling for the genre. At the age of 22 he was editing a magazine and a year later he was writing, directing and producing a successful one-hour radio show. With the arrival of TV he was soon producing an equally successful celebrity panel show, and from that he moved into film production. It wasn't until

Each week Nelson and his band of stalwarts would try and prevent the submarine from being swallowed by various giant creatures, such as a giant octopus, a giant whale, a giant eel, a giant jelly-fish or a giant piece of sentient seaweed.'

1960 that he produced and directed his first science fiction film, which was a mediocre remake of *The Lost World*. After a run of success with science fiction TV series he finally met with failure when his last series, *City Beneath the Sea*, flopped badly. (The pilot episode of this was released in Britain as a feature film called *One Hour to Doomsday* and is to be avoided at all costs.) Another series, *The Man from the 25th Century*, was abandoned during production. At the moment Allen is concentrating on films after the great success of *The Poseidon Adventure*. His latest production is a similar type of film called *The Towering Inferno* in which a group of people are trapped in a burning skyscraper.

Writing about TV science fiction would be complete without a mention of *Star Trek*. Years after it has finished production it is still being re-run all over the world, and in prime time in many cases. In 1973 seven thousand *Star Trek* fans turned up at a *Star Trek* convention in New York. No other American TV series have ever caused such a response, and so far it shows no sign of abating.

Star Trek was created by Gene Roddenberry, a former pilot and Los Angeles police sergeant before he turned to script writing. During the 1950s and early 1960s he wrote some of the top American TV series, and in 1953 created and produced a successful one of his own—*The Lieutenant*. Soon afterwards, in 1964, he came up with the idea of a science fiction series that would contain all the basic elements of other successful series on TV during production. The shows would be aimed more towards adults (it will come as a surprise to many British TV critics that *Star Trek* was supposed to be an adult series). *Star Trek* was going to be a sort of space *Wagon Train*, a huge spaceship on a long mission in space—a format that would provide the writers with an endless variety of story ideas. In theory, at least, but as is so often the case the writers soon became bogged down with one basic plot which they used again and again. By the end of its run there wasn't much difference, as far as the stories were concerned, between *Star Trek* and *Voyage to the Bottom of the Sea*.

At first Roddenberry had difficulty in selling the idea and two of the big networks had turned it down before NBC agreed to provide finance for a pilot episode. At that time the late Jeffrey Hunter was chosen to play the part of the first officer (the character then called Captain Pike). Leonard Nimoy was cast as Mr Spock because Roddenberry had always wanted him to play an alien ever since he had appeared in an episode of *The Lieutenant*. Nimoy didn't like the idea of having pointed ears but Roddenberry was so convinced that he would personally write a script that would give Spock an 'ear job' if Nimoy still didn't like them by the thirteenth episode. The ludicrousness of the proposal hit Nimoy and he gave in.

The pilot, a very expensive one because of the sets and effects, was shown to a few executives in February of 1965. They rejected it, saying it was too 'cerebral'. Surprisingly, Roddenberry didn't abandon the whole project but offered to

make changes to the show's basic concept. As a result NBC broke with precedent and asked that a second pilot be made. The changes included the dropping of the Second in Command of the *Enterprise* who happened to be a woman. The rest were apparently reasonable enough. A tough, strong-willed woman being in such a position of power. That was in 1966, before the Women's Liberation movement had gathered strength. Today the character would probably be acceptable. The incident demonstrates how difficult it is to create a valid science fiction idea to a mass audience—the possibility of real change is ignored, instead they want to see the future as a cosy reflection of their own way of life, but with shinier hardware.

Another change was the actor who played the captain. Jeffrey Hunter was making a film and was unavailable so William Shatner was chosen to replace him and the name of the character was changed to Kirk. This time NBC were perfectly happy with the pilot and the series went into production. Incidentally, the original pilot with Hunter was later used as flashback material in a cleverly produced two-part story called *The Menagerie*.

Star Trek was never considered to be a great success, despite its large cult following, by the standards of American TV production. It was very well in the Nielsen Ratings (like most TV rating systems the American one seems unconnected with reality) and only managed to last a whole three seasons because of a massive write-in campaign by its mostly young fans. This occurred halfway through the third season (January 1968) when NBC threatened it with premature cancellation. The write-in (over 100,000 letters in one month) persuaded the network to keep it going until the end of the season but they were determined to kill it off and they did so.

Over the years several science fiction writers who contributed scripts for *Star Trek* were Robert Bloch (others include Theodore Sturgeon and Harlan Ellison).

'I did three *Star Trek* shows,' said Bloch. 'As the series went on there was more interference and more changes made with the scripts. I don't think any of my three scripts were perfectly realised. One of them, *Catspaw*, was probably better realised than the other two. It was almost a Halloween fantasy about a planet controlled by wizards and witchcraft. I did the episode about *Jaws* and the Ripper. In my original script I decided to mechanise the story which destroyed most of its atmosphere.'

Talking about the belated popularity of the show, Bloch said: 'It is a very interesting phenomenon. There are so many factors at work if it did really do as well as it has done. I can't correctly analyse such a phenomenon I'd be inflexible and probably a multi-millionaire. First there is the Jungian approach, which I don't completely understand but I accept, I accept, for example, that in this country young ladies from the 1950s to the 1970s are not so much interested in their own horses. I don't completely understand, except in the Jungian sense, what the unconscious, symbolic significance is but it's probably a form of sexual sublimation. The reason I bring that up is because *Star Trek*'s most successful characters are the females. It's promoted it, tried to save it, swooned over Spock and still bring out the fan magazines by and large, were, and are, female. When *Star Trek* was designed it was thought that William Shatner, the actual star and the *Alien* character type, would emerge as the significant figure in the series. The producers were very surprised when it turned out that Leonard Nimoy as Mr Spock became the symbol of *Star Trek*. All I can say, and with hindsight it's easy, is that when *Star Trek* took hold in the late 1960s it was at the height of the cult of the cool and certainly no one was cooler than Mr Spock. He displayed no emotion, not even the anger that was allowed other cool figures like Clint Eastwood and Steve McQueen. He was really cool, and he was alien, which was a winning combination. Girls were attracted to him because other females didn't seem to turn him on, but with me, they could say to themselves, he'd be different. In other words, his coolness was a kind of a challenge to them and of course later on the producers played up this aspect of the character.'

Bloch does think that the science fiction element in the series had something to do with the show's popularity. 'At that time we were in the middle of a period of heightened publicity for space exploration... everyone was just watching the first moon landing, and *Star Trek* offered the prime-time wars of the science fiction field... escape. The world is in a rotten shape so let's get out of this world and go and take law and order to the lesser breeds of the Universe.

It also had the appeal of being about a homogeneous family unit with all the races living in perfect harmony aboard the starship... it was basic wish-fulfillment.'

During the last few years Roddenberry has tried to get other TV science fiction projects off the ground but with little success. First of these was *Genesis II*, which starred Alex Cord as a twentieth century man who wakes up in the far future (an old and tired science fiction idea that was spoofed by Woody Allen in his film *Sleeper*). It was something of a flop. Roddenberry, who liked the basic concept, remade it under the title of *Planet Earth* with John Saxon as the new star. Once again Roddenberry's hopes were dashed. He failed yet again with a project called *Quaxtor* which was supposed to have starred Leonard Nimoy as a robot who years for human emotions (an obvious variation on his Spock role) but Nimoy changed his mind about the series and he was replaced by an actor called Robert Foxworth.

Another science fiction project that appeared at about the same time as *Star Trek* was one called *The Invaders*, which starred Gerry Anderson. The series was built around the idea of a man who has discovered that alien invaders have landed in America but is unable to convince anyone in authority. A paranoid's dream, the series had its origin in the successful and long-running show *The Foghorn* in which the harassed-looking David Janssen spent each episode trying to convince someone that he had been wrongly convicted of his wife's murder, only to have something go wrong at the last moment. It was the same with *Thinnes*... he always managed to throw the blame on the aliens. The alien scheme in *Conquer America* (one episode had the aliens conditioning moths and butterflies to become carnivorous) but was never able to get his hands on any solid evidence. He wasn't helped by the fact that the aliens simply faded away if they were killed. With such a rigid formula the series was as dull as it sounds. It was also visually dull with few special effects except for one sequence that showed a flying saucer landing at the beginning of each episode. The aliens, as they had been re-structured to look like humans, were also an uninteresting lot. The only way they differed was in having stiff little fingers. *Yes, stiff little fingers!* Even the makers realised how ludicrous this device was and soon dropped it.

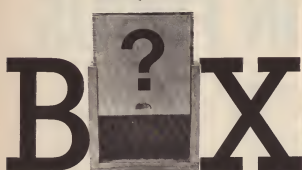
'Star Trek was going to be a sort of space Wagon Train, a huge spaceship on a long mission in outer space—a formula that would provide the writers with an endless variety of story ideas.'

After the mini-boom of science fiction series on American TV during the 1960s (one can stretch this to include the 1950s) the series *Star Trek: The Next Generation* and *Star Trek: Voyager* were *Unic* which often had episodes that more than bordered on science fiction, especially those written by Harlan Ellison) the 1970s have been rather lean to date. At the moment the nearest thing to science fiction series, apart from *Planet of the Apes*, is *The Six Million Dollar Man*. This stars Lee Majors as Steve Austin, an astronaut who has lost both legs, an arm, and an eye, in an accident. The doctors have put him back together with artificial bits and pieces which together cost six million dollars, hence the clever title. As a result he can now run at 60 miles per hour, bend steel bars, see through brick walls, leap tall buildings with a single bound... which all sounds very familiar. The special effects leave much to be desired but, not surprisingly, the series has been a big success for the ABC TV network.

Better things may be on the way for American TV audiences in the unlikely form of Sir Lew Grade. He is trying to interest the networks in a series called *Space 1999* which is being made in England (Gerry Anderson is handling the effects) but it's not clear if American audiences will buy fifty thousand dollars an episode. Sir Lew needs American backing to make it viable. And of course, there's always Harlan Ellison. He has written a script for a pilot episode of a series to be called *Bloch*, which is supposed to be a parody of a robot police force in the future. It was probably suggested by the excellent film *Trillo 1138*. As for the title... it's derived from the *Brazil soap* pad, made from *steel fuzz*. ☉

READERS' questions on any aspect of science fiction are dealt with in this feature. Send them to **THE QUERY BOX, Science Fiction Monthly, New English Library Ltd, Barnard's Inn, Holborn, London EC1N 2JR.** They will be answered as soon as possible.

THE QUERY



WHOSE CHILDREN?

I would like to know if Clifford D Simak has written a book called *Children of the Mind*, and if not, who wrote it and who are the publishers? S Lawrence, Trafford, Sale

Sorry, but I can't trace any such title—certainly not by Simak, unless you're thinking of *Out of Their Minds* (Sidgwick 72), which is a humorous fantasy about the children of men's imagination. Leaving aside M P Shiel's *Children of the Wind*, which dates back to 1920, the closest I can get to it is William Deister's *Children of the Void* (Orion '85). More recent possibilities are *Yesterday's Children* by David Carroll, or Roger Ewood's collection for youngsters, *Children of Infinity*, both published last year by Faber.

Then there's AE van Vogt's *Children of Tomorrow* (Sidgwick 72), EE Smith's *Children of the Lens* (Allen 72), and Wilmar H Sharr's *Children of the Atom* (Belman '84), which was out of her astounding takes of mutant superkids. And there's more... but it's about time for Childhood's End.

TIT-BIT

When was *The Living World*, by Carl Madox, in the *Big Science Fiction Library*. First published? Ian Gentle, Glasgow

The only issue of this Pearson's series of ninety-seven stories I have among my copies is *The Hell Fruit*, by Lawrence F Rice, a tale of the linear spacetrays set in 2220 A.D. It is otherwise undated and unnumbered; but as far as my recollection and records on the series appeared round about 1952 when many British publishers were nibbling at science fiction—and not making a very good job of it. The stories were probably written under pen-names.

OUT OF THE BLUE BOOK

I understand that Edgar Rice Burroughs story *The Land That Time Forgot* was first published as a serial in an American magazine. Can you give details? Peter Lanning, Worcester

The book, first published in Chicago in 1924, actually combines three short novels which originally appeared in the *American Blue Book*. The first, to which Burroughs gave the title *The Lost Continent*, was in the August 1919 issue. A sequel, *The People That Time Forgot*, followed in the October issue. *Out of Time's Abyss* cut December. The three stories were reprinted in *Amazing Stories* in 1927. The *Land That Time Forgot* and *The People That Time Forgot* are currently available in paperback from Tandem.

ALL-AMERICAN

Is Isaac Asimov a pseudonym? If so, what was his original name? M Hooper, Milton, Gloucester

Isaac Asimov—sometimes russpelt Asimov—is no pen-name, though he is one for his younger readers (see below). Born in Russia in 1920, he moved to the USA with his parents when he was 3 and became an American citizen in 1939. At present he is associate professor at the Boston City School of Medicine. He has two children, David and Robyn, by his first wife, Gertrude, whom he married in 1942; they were divorced in 1973. He visited England for the first time in

June last year with his second wife, Dr Janet Jeppson, who also writes—under pseudonyms.

ASIMOV'S DOUBLE

Reading *A Second Isaac Asimov Double*, I notice that *The Big Sun of Mercury* and *The Ocean of Venus* were initially written in 1936 by one Paul French. Is this Asimov's pen-name or are these stories only presented by him? PJ Ford, Sutton-in-Ashfield, Notts

Paul French is the pen-name used by Asimov for his 'Lucky Starr' stories, which were first published in the USA as follows: *David Starr, Space Ranger* (1952), *Lucky Starr and the Pirates of the Asteroids* (53), *Lucky Starr and the Ocean of Venus* (54), *Lucky Starr and the Big Sun of Mercury* (56), *Lucky Starr and the Moon of Jupiter* (57), *Lucky Starr and the Rings of Saturn* (58).

The first two titles were published in hardback in the UK in 1953-54 (*World's Work*). The story-titles were modified for the paperback series published by NEL (including three Double titles), which are by-lined Isaac Asimov.

LONG SLEEP

Can you tell me whether William R Barrett, author of *Sleeping Planet*, has written anything else, and if so, when published? I've been trying to find an answer to this question for several years and would be glad if you could provide one. George Patrick, Strirling, Scotland

Only answer I can give you at present is that when *Sleeping Planet* was first published in the USA in 1969 the author was revealed as 'a young reporter' with the Jacksonville, Florida, *Journal* who was 'presently at work on a new book'. One of his other interests was hunting, and he was awarded today a rifle with telescopic sight. I've been hunting too, but the quarry eludes me.

But you might keep your eyes on *Analogy*, where this 39-chapter novel first appeared as a three-part serial in 1964. It was also published here by Collins; and I must confess that after chapters the sleep-inducing plant the invaders used as a weapon had its effect on me.

MYSTERY MAN

Is Eric Frank Russell still alive; if so, why has he stopped writing? Paul Lee, Streatham, London

Yes; Britain's veteran *Seeker of Tomorrow* is still alive and living in Wyalit, Clackness. I received one of his lively, long letters only yesterday, because we don't correspond as frequently as we did in the years ago before he caused a *Great Explosion* with *Sister Barrier*—the story based on the notions of Charles Fort. His *Copied Net of Kim*, which sparked off the magazine *Utopia*.

Though he celebrated his seventieth birthday last month, Russell still does his stint at the typewriter. But he's not done short stories for some time, preferring to expand his energies on books and paperbacks—because, in my view, he's writing a lot better. His first one-fiction book, something on the lines of his *Great Mysteries*, was published nearly fifteen years ago. Another collection of his stories should be available, however, by the time you read this.



I read with great enjoyment Wally Gillings' article about me and would like to add one fact which he was too modest to mention. Not only did he encourage me in my early fiction and non-fiction writings, but he also gave me the first typewriter I ever possessed! I can remember carrying it home from Ilford, some time around 1937. . . .

I suspect that every successful writer has a good editor behind him: I know I did. Arthur C Clarke (Colombo, St Lanka)

Reading your letters page I notice that readers talk a lot about science fiction. They ask if women like it and speculate on what it should try to do, but they do not define it. The first thing I discovered when I began to ask what of meant was that most dictionary definitions are either incorrect or incomplete.

First, science fiction is about the future. No, most of it is set in the future and most stories set in the future are of, but some of it is not set in the future. *The Invaders* and *Undermind* are two TV series that were set in the present. SF stories that use ancient history, such as the tales about Atlantis, are set in the distant past. And, of course, time-machine stories can be set in any period.

Second, if it is based on science, I admit it would be strange for it not to be based on science, but the fact is that it isn't. Scott Edolstein's *The Exhibition* (SFM Vol 1 No 8) is set in the future but it is not about science. Jack Vance's *Eyes of the Overworld* uses magic, as do Andre Norton's *Witchworld* books.

Stories that take place on an alien world. Some people might call these stories science fantasy, but I believe that this would make a too limited. A scientific theory requires a statement of both cause and effect and a plausible guess about what happens in between. Anne McCaffrey's *Dragonquest* does not explain how 'thread', the problem of the Red Planet and main Fern. Yet *Dragonquest* is of and none of these books could be said to be based on science fact or speculation.

Neither could Dan Morgan's *Time* books or Philip José Farmer's *To Your Scattered Bodies Go*. Dan Morgan's characters are not the product of science. Their gifts

are no more scientific than high IQ or athletic ability. In fact, the ability to read minds is rendered no more scientific by labelling it telepathy, but it is made more plausible. Although psychologists have proved ESP as surely as they have proved many other psychological phenomena, most do not believe in it because there is no materialist explanation of information transmission from one mind to another without using a physical channel.

Similarly, Farmer's 'mushrooms' are not made more scientific by calling them energy-mass converters. It is like calling a magic wand an energy-matter converter. It doesn't make it less magical, but it does make it more plausible to twentieth-century man.

But the twentieth-century man of a special type—the modern David Livingstone, who wants to visit the Dark Continents and find new places and new life forms—this man must make his journeys in fiction. And the fiction which deals with new places, people, creatures, plants and gods is called fantasy. Its subdivision, science fiction, differs from the rest in plausibility. SF tries to explain its strangeness by using scientific or quasi-scientific jargon, writing in the distant past or future, invoking alien races so advanced that their science is incomprehensible.

I see if as fantasy that does not necessarily take place in the future, or use science, but which is plausible to the modern reader. KJ Ward (Wollaston, Northants)

Congratulations to Michael Ashley on his article on women SF writers. It is interesting that when a woman enters SF, she often turns out to be a writer's writer—one of those immensely subtle technicians the rest of us must study, eg Dorman, Emshwiller, Russ, Saxton. When Saxton, my British example, publishes a new story or book (there are three Saxton novels) the rest of us rush to see what impossible-to-say ideas and emotions she has tackled now and what means she has invented to convey them.

How about a story from one of all of these authors?

James Blish (Harpsden, Hanley)

Ed: This is scheduled to happen later this year.

has been in print since 1970 and during that time Jim Goddard has managed to produce eleven issues; the CYPHER first five or six as co-editor but, he's produced all the more recent issues in splendid isolation. The fanzine is a little too large to fit into your pocket, but nevertheless easy to handle, and it contains almost fifty pages of book reviews, readers' letters, interviews and articles. Amongst the list of distinguished contributors you will find the names Brian Aldiss, JG Ballard, Philip Harbottle and Bob Shaw, which give some indication of the standard of writing therein.

FANZINES IN FOCUS

Jim Goddard and Cypher

Cypher is published from Nomanland in Wiltshire and although its habitat implies that no man would ever look at it, the fanzine bears the distinction of being probably the only amateur of magazine to receive a grant. The Southern Arts Association have just awarded Jim Goddard with enough money to bring out the next three issues; this, no doubt, is a great blessing, as editing a fanzine is a costly business especially when the subscription fees rarely meet the cost of production.

Fanzines are many and varied, some treat very seriously, concentrating on the more intellectual overtones, and some are almost incomprehensible to anyone other than 'real fans' involved in fanzine activities discussed in fanzine language. *Cypher* is aimed towards the sf reader who comes in the middle of these two extremes, it includes no fiction or poetry and only a small amount of black and white artwork, most of which is supplied by Kevin Cullen and is definitely worth looking at.

Book reviews appear to be the staple diet for *Cypher* readers and it is obvious that Jim attaches great importance to them, in fact he prepares some of them himself. He likes to keep abreast of current science fiction, reading all the major books and at least some of the minor ones; this movement in step with the progress of sf is obviously a key factor in *Cypher's* success, the fanzine virtually bristles with knowledge acquired from years of dedicated research.

Jim's interest in sf was sparked off as a schoolboy when he heard BBC Radio's *Journey Into Space* and although nowadays he doesn't pursue much space opera his interest in sf has progressed to embrace the work of Philip K Dick, JG Ballard, Brian Aldiss and Clifford Simak. His introduction into the world of fanzines came when he joined the British Science Fiction Association, got hold of some 'zines', decided that they didn't say much about sf and went home to start his own.

Apart from producing *Cypher* Jim has written some fiction but he doesn't write professionally.

I believe a science fiction writer should have sufficient scientific knowledge to back up any scientific aspects of his work and to ensure that he doesn't contravene any laws of science. Without this scientific background you cease to write sf and it becomes fantasy.

At the beginning of the New Year *Interplanetary News* changed from an amateur publication to a professionally produced magazine, but this doesn't seem to be in the offing for *Cypher*.

I guard my amateur status as other people might guard their professional status. To produce *Cypher* as a professional publication would change its character making it more money-conscious which would encourage degeneration. This is not to say that I don't intend to take pains to make *Cypher* look as professional as possible; anyone who has received the zine from issue one will, I hope,

be conscious of continuous gradual improvements in presentation. Since issue one I've changed format three times, from quarto to A4 to A5, changed typeface once, and changed production method from mimeo to offset litho. I've changed gradually the direction in which the zine is heading, made it more general and less fan dependent, made it less of a hero-worshipping fanzine about sf and more of a critical magazine about sf, and one to which, I hope, authorities in the genre are happy to contribute. This change is, I think, reflected in the growing number of university and library subscriptions, and the large number of subscriptions from people who are only on the fringes of active fandom. I hope this doesn't sound pretentious, it's not meant to, nor is it meant to be a finger in the eye for trufans, whose activities I pursue with vigour myself. I've developed ideas about layout and presentation, and, I hope, learned from criticisms in this department, and I hope this too is reflected in what *Cypher* is today.

Jim obviously gets a great deal of satisfaction from producing *Cypher* and in common with other fanzine editors attaches more importance to his magazine than to what he does to earn a living. This remark seems to tie in with those of Bram Stoker of *Dark They Were & Golden-Eyed* who emphasised the importance of sf as an escapist literature for those of us who don't have rewarding jobs. But Jim does not agree:

'I've been tarred with the escapist brush many times before, but to my mind this is a fallacy, except in the sense that all fiction is escapist, because most modern sf deals with issues which, although set possibly a hundred years in the future, are still things which people have to deal with in their everyday lives. The theory that sf is a particularly escapist form of fiction has never been satisfactorily substantiated, but, on the other hand, is easy to refute. In a sense, sf has taken up where writers of great social conscience, such as Dickens, left off. Much contemporary sf questions the values of our society, points acutely at its failures, and sometimes even tries to suggest ways to tread a better path. The issues with which modern sf concerns itself are things like pollution, poverty, population control and mis-use of the Earth's resources; other fictions are concerned with different things, Mills and Boon romances are self explanatory, westerns are known to everyone, and go along with historical novels, spy thrillers, murder mysteries etc. SF deals with burning issues, maybe not very well, maybe not deeply enough; these other genres deal with things most of us will never experience. Which is the most escapist? I might just add here that in one sense my job is rewarding, in that I help to provide an essential service, but you're right in another sense, *Cypher* and allied activities provide the main intellectual outlets of my life.'

Apart from all the criticism levelled at it it is still the only form of literature to inspire the organisation of conventions and the phenomenon of the fanzine. Jim dates this fan activity back to the 1920s and '30s:

'It was supposed to stem from the 1920s and '30s when sf was a minority pursuit and everyone went to sf magazines and got to know each other. It just grew from that and there were so few of them that they just stuck together for self defence.'

Jim recognises the changes in sf in the past ten years as a move away from technology towards people; he commented on the role of the sf writer today, and whether he should be fulfilling any sort of moral, political or social purpose:

'I think the primary function of sf, and indeed of all fiction, is to entertain. Having achieved that, if the writer can motivate his work with a moral purpose, and I mean that in the broadest possible sense, whether it be a disguised plea for censorship or a dissertation on the merits or demerits of Communist politics, the advocacy of the pursuance of a religious philosophy or of sexism or the compulsory teaching of sf in all schools, then that is all to the good. The sf writer, like all of us, has motivation as one of the driving forces of his life, if he can successfully mix his motivation with his writing he'll probably be a happy sf writer, and, if the equation works as it should, someone who is happy at his work should produce a satisfactory finished product. However, if in the pursuance of this moral purpose he ceases to entertain, and resorts to undisguised diatribe and homilies, then it's time he looked for another occupation. And there are a few writers like this about. I don't expect any writer to set forth something with which I agree entirely, but I do expect him to provide something on which, whether for or against, I can exercise my intellect. This is one way in which sf has improved markedly within my memory, for years technology was predominant, now, however, man has usurped this hallowed position. As a result of this the characterisation of sf stories has improved, it still has a long way to go, but the cardboard heroes of years gone by are undergoing a strange transmutation and setting forth anew in the guise of fallible creatures of flesh and blood.'

Cypher can be obtained by subscription of £1 for four issues or at 25p each from: James Goddard, Plovers Barrow, School Road, Nomanland, Salisbury, Wilt. *Cypher 11* contains three views on *Billion Year Spine* by Brian Aldiss from JG Ballard, Bob Shaw and Philip Harbottle; John Brady on *Solaris* and reviews of: *Syzygy* by Michael G Coney; *Dying Inside* by Robert Silverberg; *The Invincible* by Stanislaw Lem; and *The House in November* by Keith Laumer.

Cypher 13 will be a special issue devoted to British Science Fiction Today with articles by, hopefully, Brian Aldiss, Chris Priest and James Blish. ☺

... a fine morning in Australia. The
IT WAS sun set an hour above the
horizon. A large grey bird was
flying towards it thinking it was a hole in the
sky. Below lay a hazy mirage—desert
disappeared in two by a long white line that
stretched from horizon to horizon. This was
the Great Australian Thoroughway. Perth to
Brisbane. Two thousand, four hundred miles
of straight concrete boredom, apart from the
curves necessary at its Eastern terminus. It
was a popular topic of discussion in the
Trination Senate. The left wing abhorred it
as a total waste of money. The right wing
loved it for the prestige it gave them, and
the right wing had held the balance of power
in Trinations for a long time.
It was a fine road in Australia.

Somewhere in the western beginnings of
this fine road, on a fine morning in Australia
sat a car. Using the term 'car' extremely
loosely, it was ridiculously long, thin, and
glittering black. It boasted two massive
wheels at the rear, almost non-existent
wheels at the front and a midged sized peep-
hole sort of a cockpit about a third of the
distance from the rear. It sat on the throug-
way like an arrow on a gigantic crossbow.
Squatting on the road beside the machine
sat a motionless figure, covered from
neck to foot in a white protective
racing overall. By his side sat a
black crash helmet. His eyes
stared out along the monoton-
ous white road towards the
sombre cluster of buildings that
he could just see poking
their rigid spires above the
horizon.

George Proctor was waiting
for the military securitor to
join him. A radio hidden in his
overall top pocket was the only
sound that disturbed the desert
morning's silence.

... Corporal Jones warns of the
consequences of this act,' the radio intoned,
'and suggests an immediate inquiry to be set
up. Now over to our Australian on-the-spot
reporter Terence Overbury for the latest
news of the American-Anglo-Australian
nuclear test.'

There was a brief crackle and then a
sound like a car back firing.

'Hello World! This is your on-the-spot

speed, though not officially disclosed, is
thought to exceed anything previously tested
on land. The trial is to take place along the
Great Australian Thoroughway and because
of this the road will be temporarily barred
from all other vehicles. The test trial on the
Astoria was surrounded by much contro-
versy owing to the strange disappearance
from public view of the test driver Stewart
Endleigh, after the trial had been com-
pleted. Misses and Messrs representing the
RITC would not comment...

'Too right they would not comment,'
George muttered. They just had not been
able to stop the poor guy from shaking. As
far as George knew the driver was probably
slung in some heavily guarded room at the
back of the Australian military asylum, still
shivering furiously as if he had been pulled
out of a block of ice, and still trying
desperately to form words through those
unpleasantly chattering teeth. There was
absolutely no way for anyone to com-
municate with him. Grunted monosyllables
were all that he could squeeze out. No
pen would stay in his constantly moving
hand. Nothing at all to indicate what had
gone wrong.

George reached inside his overall pocket
and switched off the radio. A mile or
two along the road from where he
sat a small cloud of dust had
just appeared, blown up in the air
by a dirty white landrover. A
second later the landrover's
whining was audible. It pulled
up some distance behind the
Astoria with a pair of
high-powered brakes. Dust
and silence settled around the
two machines.

Both landrover doors swung
open and two uniformed men
stepped out onto the concrete.
One was tall and sported a thin,
greying beard. The other was clean-
shaven but wore his thick, black hair at
almost shoulder length. Their uniforms were
white, touched here and there with gold
anklets and badges of office. Both were
hatless.

The bearded officer sauntered towards
George smiling and greeted him with a
firm handshake.

'Well George, my friend, how are you

appeared half an hour later at exactly the
same spot at a standstill, and that is where
we picked Endleigh up an hour later. Of
course it must have been faulty equipment—
where could a car and driver disappear to
in the middle of an open desert?'

upon mile of never chang-
MILE ing desert and brush rolled by
outside the Astoria's minute cockpit
window and the driver's face stared in
front thereof on into the horizon, an un-
wavering straight line, almost hypnotic in
its monotonous rigidity.

At the wheel, squeezed tight into the
figure hunched seat, George swayed. No
air conditioning had been fitted into the test
model and heat penetrated every pore of
his body. The Astoria was cruising along in
second gear performing well, apart from a
slight pump every minute or so as they
passed over joining strips between the
great concrete slabs of the road.

'Now for third gear,' George thought.
He moved his hand up to a small lever on
the dashboard and twisted it quickly. A
light just left of the lever turned from yellow
to orange indicating a successful change-
over of gears. The Astoria leapt forward
with a sudden surge of power. The noise of
the engine and the wind whistling past out-
side increased. The bumps in the road be-
came more frequent.

'Jesus—these are damn annoying!'
The speed increased. George flicked into
fourth... and then fifth... sixth.

The machine was shaking in strict rhythm
now like a machine gun or a heartbeat
pumping at a rate of one per second. The
sun was directly ahead split in half by a
metal band that ran down the centre of the
window. The pushing of the car as it soared
over the bumps was causing the sun to move
from one side of the metal band to the other
with irritating consistency, like somebody
switching a flash light on and off in one's eyes.
Seventh gear.

The desert scenery became a yellow and
brown blur, little after mile of road disap-
peared under the surging machine. There
were now no perceptible gaps between the
bumps in the road. The shaking of the
Astoria as it stormed over them became a
tortuous pulsing rhythm. The swing of the
car from side to side every time it crossed a



SCIENCE FICTION MONTHLY

By David Stammers

Everything vibrates. Your soul vibrates; the air vibrates; the sea, the rocks, the fauna, the flora, the stars; the very universe itself vibrates. All at the same rate as the dimension in which they exist. Vibration is its life force—its energy. If you change the rate at which you vibrate then you enter another dimension. You occupy exactly the same area in space as you did before your vibrations increased, only you no longer exist in your world because your physical and mental pulsations are at a different rate.

reporter Terence Overbury calling from
Australia. News has been filtering through to
us of a brand new series of Atomic Ex-
plorative Tests to be conducted along a group
of islands near to what scientists here es-
timate to be the deepest part of the Pacific
Ocean. Fifteen atomic warheads will be
detonated, each on different islands, but all
at exactly the same time. This exceeds the
Trinations last test, which took place two
months ago in May, when twelve warheads
were successfully detonated. This is, of
course, a great achievement for the Trina-
tions. Over the last two years 102 success-
ful tests have been conducted in the Pacific
nuclear testing areas alone. The President
of Britain said to-day...

'Yeah,' thought George 'I felt the shock
waves from that last test and I was on the
other side of Australia at the time. Still, all
for the furtherance of scientific knowledge...'

... And now back to our San Francisco
broadcasts...
Thank-you Terence, and now for the
rest of the news. To-day the Australian
Transport Corps is conducting its second
speed trial on the Astoria 4124, which was
designed by one of the ALTC's leading
designers Jerome Lowe. The Astoria's

feeling?'
'As well as can be expected.'

The officer grinned foolishly. 'Haven't
your chest of heart here you?'

'No, I'll be O.K.'

The officer's face relaxed slightly. 'Fine,
fine,' he beamed, 'well, you know what you
have to do, don't you? Good, good. Two of
our men will be probably flying over you
'We'll have you monitored on radar all the
way. I...'

'Radar? Why? I'm hardly likely to get
lost. The road only goes to one place!'

'Yes... er... just a precaution, you
know, just in case...'

'Precaution? Precaution against what?
I've had a very nasty feeling all along that
you have been hiding something from me.'

'Oh, it's probably nothing, nothing at all.
Our equipment will probably fail during the
last test, that's all.'

'Why? What did it show?'

'Well... This is not a good any further,
mind, but we have a hand radar station not
far from here and, quite naturally I suppose
because of all the publicity we built up for
the first test, one of the lads tracked the
Astoria, and it... well it... just disap-
peared off the screen. Right at the moment
it had reached its greatest speed. It re-

join in the road became narrower and nar-
rower, until the whole car was enveloped
in a steady, merciless vibration.'

'And the sun turned on and off, on and off,
repetitive, stroboscopic, hypnotic...'

George's eyes became locked to the
sun's incessant blinking. It captured his
eyes, his mind, his soul, until he was vir-
tually a total, painless vibration. In his
flesh, George's sun vibrated with mega-
maniacal speed. George's car vibrated.
George vibrated. His whole world was one
tremendous, mind shattering, intense vibra-
tion.

And the sun turned on, off, on, off...'

The whine from the screaming machine
assaulted his ears with demoniacal insis-
tence. His mind went hay. The road was a
blur of white ahead of him. Something in the
back of his sanity told him that this had to
stop. With a tremendous effort of will he
forced a tortuous path with his left hand away
from the tiny control wheel. With almost
unbearable slowness it made its way towards
the cut-off switch.

And the sun turned on, off, on, off...'
It was too much, he couldn't make it. His
very cells felt as though they were being
shaken apart. Everything had become a
yellow-red blur. He felt a numbness creep

ing through his body. His vision was darkening. He felt the warm pulsating metal of the cut-out switch. A mist descended over his eyes. Flashing lights raced across a steadily increasing black void. His consciousness drained away. And the sun turned off.

Securiquard crawled out of a hole ABEARDED in the sky screaming. 'Just disappeared . . . just disappeared,' then turned purple, shuddered and disappeared with an echoing pop.

A white landrover wobbled out from behind a silver pulsating star, humming like a bee. Then it turned purple, shuddered and disappeared with an echoing pop.

A yellow sun rolled out of a cave mouth straight into the black shimmering waters of a lake, steamed, shuddered, turned purple and disappeared with an echoing pop.

The vision faded and all that was left was a steady plopping as of water dripping onto rock, and George dizzily opened his eyes. His mind was still spinning. He felt sick, very, very sick. Two feet in front of him, just beyond the glass window pane was a green, damp wall of rock. The front half of the *Astoria* sat solidly inside the rock face.

'What the hell!' thought George. He shook his head trying to rid himself of an irritating buzz and trying to make some sort of sense out of what he saw before him. There was no sign of a crash, no torn mangled wreckage lay anywhere in sight. The front of his machine just wasn't to be seen. Instead the craggy rock confronted him.

George pulled himself out of the car and stared at the wall in disbelief. It was as though the car had slid right into the wall, like a hot knife through butter.

He turned, confused, and immediately almost collapsed at the sight that presented itself to his senses. He clutched at the open car door to steady his nerves.

He stood at the base of a massive green cliff and from there out to the horizon there lay a rambling multi-coloured landscape. Above hung a bright purple sun suspended in a vaporous, pale orange sky. His mind refused to accept the vision as reality, desperately trying to believe it as pure hallucination. George touched the ground with his fingers. It felt like spongy leather, but it was real.

All too real. Across the landscape there sprung several multi-coloured forests. Minute white trunks supported acres of black foliage. Birds with spectacular spotted butterfly wings danced from tree to tree, pecking at the oval green leaves and berries that laced the branches' highest reaches. The area to George's left was carved into equal squares. Some of these were sparkling gold, others reddish and still others a rich maroon colour. A shimmering silver ripple ran across all the squares. A river of orange and purple flowed from the cliffs, a short distance to George's right and meandered across the undulating country, finally disappearing into a thick cloud bank that shrouded the distant horizons. Sagging, spiky reeds of scarlet grew in abundance along the low river banks, tipped with scarlet, dome-shaped flowers. George felt a gentle breeze blowing along the base of the towering cliffs which filled his senses with alluring herbal aromas.

Suddenly a flash of light caught his attention. Glancing over to a clump of black and white trees a short distance to his right, he spied a glittering speck of silver weaving its way between the spectral tree trunks. It emerged out of a small clearing by the river, a silver, egg-shaped vehicle that hovered along a foot or two above the grassy surface. It seemed to be heading towards the very spot where George was standing. As it approached he noticed the machine had a tiny round window about two thirds of the way up its front. Inside it George was aware of some movement.

The egg floated across the river and,

with a sound that resembled air escaping from a balloon, it settled on the spongy earth alongside George's car.

With an almost inaudible click a black hole appeared in the side of the egg, and out jumped a man . . . or something that vaguely resembled a man. Almost seven feet tall, dark skinned and thin, so thin, almost skeletal, the egg's controller strode towards George. From his shoulders a grey cloak cascaded to the ground, held in place by a big blue brooch at his throat. Under this he wore a loose-fitting shirt made of some type of white lace. On his legs he had brown trousers tucked into the tops of a pair of knee length boots. His white hair flowed back behind his ears and hung about halfway down his back. There was no trace of beard on his elongated face.

George's mouth hung wide open. The cloaked man spoke. 'Greetings!'

'I . . . er . . .'

'What all you, human, why the dithering?'

'Why . . .'
'Good. Tell above, what in Zorey troubles you? I see nothing in your eyes but amazement and shock. Surely the other we sent back described our land to your race, and yet it seems the incredulity in your eyes resembles that of the other, the same moronic fear all your race possesses over unforeseen.'

'Other? Who . . . ? Stewart, do you mean Stewart?'

'Yes, yes, I believe that was his title.'

'But, Stewart was . . . well they locked him up.'

'Hah! Superb! Superb! Such a worthy fate for such a race as yours. The one being to bring you a warning of the realises of your doom is locked away and ignored. Did you pay no heed at all to his message?'

'But his words were ravings . . . must have been an unstable person . . . what words they were. They were mostly monosyllables granted out as if he had lost his power of speech. And in any case we could never stop his shaking for more than a second at a time. My God! The way his teeth rattled together it was a wonder he had time enough to e squeeze those grunts out.'

'Ah, I began to understand. Vibrating badly, you say. Then the passover was more troublesome than we had calculated for. The apparatus was too rapidly assembled, we have no use for such machines you understand, we calculated the power needed

to return this other purely from tests we rather hastily had carried out upon his metabolism. We obviously miscalculated in the necessary lowering of his vibrations. Do not look so astounded, human, we are not infallible, we have our faults as well. Obviously when the other re-entered your world his vibrations must have still been too high.

"Vibrating?"
"Yes, you fool, vibrations! You know, of course, how you come to be here. . . . Well, no. . . . no. . . . that is. . . . I remember is that one minute I was racing along the Throughway and the next I was shaking, shaking so much and then. . . then I was here!"

"Shaken out, human, shaken out. Your vibrations increased at such a rate that you were quite literally shaken out of your world and into mine. You are pulsing now at what we have estimated as being one tenth more than the rate at which you were pulsing in your own world."

"Pulsing? Vibrations? . . . I do not understand. . . ."

"Your blindness is tedious, fool, I know not why I continue conversing with moronic idiots such as your race seems to breed!"

"You have great contempt for me, friend, why? Why do you hate me so?"

"Hate? Oh, Traill! You cannot even conceive of the hatred which I hold for you and your miserable race. Upon the sacred remains of my only son, I swear, if I had the power or the inclination—which I haven't, I could destroy your whole misbegotten dunghill of a planet. And still even now you have no conception of the foul deed you and your pathetic meddling have caused."

"But what? What have we done? We've never even dreamt that this. . . this place existed here. Wherever here is!"

The cloaked man let out a long sigh. "Here is here," he continued, "my world is here and your world, in a sense, is here also. I shall try to explain, so that even your primitive mind will finally grasp what reality is. Everything, to use your meagre language, vibrates. Your soul vibrates. The air vibrates. The sea, the rocks, the other animals, the vegetation, the stars, the very universe itself vibrates. All at the same rate as the dimension in which they exist. Vibration is its life force—its energy. Change the rate of vibrations and you enter, what you hilariously call, another dimension. That is where "here" is. That is where you are now. You occupy exactly the same area in space as you did before your vibrations increased, only you no longer exist in your world because your physical and mental

pulsations are at a different rate to those of your world. Therefore your planet could no longer accommodate you and you were thrust into a world whose pulsations matched and mated with your newfound ones. . . ."

The cloaked man ran his long fingers through his hair and took another long deep breath. His eyelids momentarily closed, as if he was trying to gather his thoughts, and when they opened again his eyes held a glazed, pained expression. He stared at the pale orange skies and began talking again, speaking more to the heavens and himself than to George.

"Let me tell you something of our world. Our civilisation was old, very old. Our origins have been lost in the mists of time. Once was a joyous, healthy society. Oh, we had our problems, but somehow we managed to overcome our difficulties and we lived happily and peacefully for many aeons. We have been aware of your world for many centuries now. We even visited it occasionally, but the passover was dangerous to our body structure. Also the universe is in a very delicate balance and it is immoral as well as being dangerous to change that balance. . . ."

"The cloaked man was about fifteen of your Earth years ago that we first noticed the quakes. We took little notice of them at first. Throughout our history we have often been subject to minor quakes of this sort, but they began to increase in number and intensity. Then our scientists discovered that their origination was not of our world at all but of yours. By the time we discovered this it was too late to stop you, the process had begun and there was nothing in our power to stop it. So we called a grand meeting of Zorrey ministers and decided that as our world was doomed, our only course of action could be escape. We had found the secrets of interplanetary travel a century before, and so we began a programme of constructing ships to traverse the spaces between stars. Four hundred ships have been built, each capable of holding five hundred entities. But it wasn't enough, nowhere near enough. And so the Ministry met again. The decision was obvious to all, but even so we found it difficult to formulate the words. Finally a proclamation was sent throughout our lands. Everybody was to be examined for physical health and intelligence. The continuation of the species was our primary motive. Two hundred thousand of the most healthy and intelligent of our people were chosen to find a new home in the skies. The rest? The rest realising that they had no hope and rather than drag out a slow agonising death, decided to be. . . ."

"To be put to sleep" as your race so quaintly expresses it. My son. . . my son was one of those to be left behind. He lies now with a countless number of my people in shallow unmarked graves!"

He stopped again, lost in his thoughts.

"Forgive me," George questioned, "but you said the quakes originated from our

world. . . . what caused them?"

"Your bombs, imbecile, your atomic tests, your wretched disgusting experiments. Don't you see? You've started your planet vibrating beyond the level of its natural environment. Sent it hurtling through dimensions heading straight for our planet. Have you no idea at all of what will happen when two planets from different dimensions suddenly appear in the same dimension, occupying exactly the same area in space. They will coalesce, they will merge into each other, doubling the planet's mass until they are one mighty conglomeration. Rock will merge into rock. Your gravity will double in strength, your atmosphere in density."

"Is there no hope for us then? Surely there must be! Look at the land around here, back on Earth this area is flat barren desert, but this is hilly with an abundance of vegetation. And presumably there are other areas that are not directly aligned to the landscape of my world. Surely there is some hope, albeit a small hope for a minority of my race."

"Still no comprehension of the complexity of the situation, have you? Do you really think that in an infinity of cosmic vibrations there are but two planets? No! There is an infinity of planets all in parallel dimensions to yours and mine. And do you honestly think that when your world collides with mine it will stop there? Fool, you've started your planet rolling through the planes of existence, bowling into millions upon millions of other planets. Even if you could survive the crushing powers of your new found gravity and atmosphere, what sun, in whatever planet you finally end up upon, could resist pulling to its heart such a delicious morsel as a planet whose mass has been multiplied an infinite number of times beyond its norm."

Just as he finished speaking the two men felt a violent tremor race across the ground beneath their feet.

"It has started. I must be gone. My ship is the last to leave. Farewell Earthman. . . ."

"Wait! One last question, if we are rolling upwards" through the dimensions, what about rolling downwards? I mean, are there no dimensions below us?"

"No, you were the first. Farewell."

Before George could ask what he had meant by that last remark, the thin man leapt back into his egg-shaped vehicle. It hummed, lifted slightly off the ground, turned and hovered off towards the trees beyond the river.

George stood staring out across the crazy, impossible scenery watching as strange, shimmered, round balls began materialising in the lower areas near the river banks. A while later a silver needle shot up into the skies from somewhere beyond the wood into which the egg had disappeared. George wiped the palm of his hand over his sweating forehead trying vainly to grasp what was happening.

It was not the round balls that insisted on popping up everywhere, but the grey, square-shaped mist he could see travelling towards him with its lumpy four wheels and its two unformed ghost-drivers, that finally brought the tears of madness flooding into George's eyes.

George screamed. And his scream echoed throughout the eternal cosmos, bridging a billion dimensions and reverberating across the endless voids of timeless space.

By Ian Watson

Our Loves So Truly Meridional



When the glassy catastrophe barriers appeared the whole planet found itself divided up as neatly as the segments of an orange! Now the Education Ministry in Lagos has stopped issuing globes of the world with everything painted black apart from the single segment of the sphere that is mid-Euro-Afro. They're introducing a new design; the single segment alone. Visualise a bow with a fat bow-belly tapering to a point at top and bottom—a steel bow string taut between North and South. That's what the world looks like now, officially.

OBI Nzekwu, age 35, profession: teacher of Geometrical Religion in a small school in Eastern Nigeria in the mid-Euro-Afro Conglomeration in—that's me.

Till five years ago I was teaching common or garden geometry and algebra, and there was nothing religious about Maths at all. Then, need I say, the glorious Catastrophe Barriers appeared and we found the whole planet divided up neat as the segments of an orange. Bless Great Circle! Bless Greenwich Meridian! Bless Barrier!—we exclaim in joy.

It wasn't so much of a catastrophe for us, you see, as it must have been for those 'less fortunately placed' . . . A euphemism, one doesn't speak in terms of 'Elsewhere' nowadays, it's not done. (Non-names for non-existent places such as America, Australia, China and Japan . . .) The Education Ministry in Lagos has stopped issuing globes of the world with everything painted black apart from the single segment of the sphere that is mid-Euro-Afro. They're introducing a new design: the single segment alone. Visualise a bow with a fat bow-belly tapering to a point at top and bottom—a steel bow string taut between North and South. That's what the world looks like now, officially. (Besides, it uses less material, that way.)

And I have to teach this nonsense! I tell you, it offends me, logically! We can see through the barriers, can't we? Eastward and Westward! Landscape doesn't just vanish into void. Or people. Or towns.

There's just no passing through physically. Or shouting with the voice. Or radioing. Aircraft that tried to fly over slid to the ground in ruins. Nuclear missiles that the Euros tried to punch a hole through with went bang in the sky over the North Atlantic, but that was all. Tunneling; hasn't worked either. I'm not sure if wind and rain and such pass through—but I suppose they must, somehow, or there'd have been drastic climatic changes by now . . . which I haven't noticed. The Yam Rains have gone on falling at the right time for planting.

It's not actual glass. Though it looks like glass and feels like it to touch. Some force field, they say.

Of course being translucent we can read signs held up on the other side and talk in sign language—like 'sloopy savages!'—and I suppose theoretically we could be shuttled round the whole world from segment to segment by this means. But it's discouraged, this contact thing. Irreligious, would you believe? By the time mid-Euro-Afro had banded together after the chaos and wars of the first two or three years, the proselytising Church of Mathematical Geometry was in charge in most states of the Conglomeration.

Because, being 'well-placed', we're quite happy with the situation, would you believe?

We have to cross the Sahara to reach Euro, there's no sea route any more. But set against this, the Nigerian and Libyan oilfields; the industrial heartland of Euro; its rich farmland; the forests of Scandinavia. All this in one unified Conglomeration! Then, politically, we Africans saw Namibia automatically liberated—and the remnant of White South Africa duly cut down to size! (The Catastrophe Barriers fell neatly into place on the Greenwich Meridian, then 20 degrees east of Greenwich, presumably following the same pattern all the way round and back again. From which you may deduce, if you like, that whatever put them there was perfectly familiar with our old way of mapping the world! I'd say at this point, consult a globe or an atlas, except that there aren't any, only under lock and key!)

Politically, the Euros are happy too. They can be friends with us, since the White Africa problem was solved by our Nigerian army quickly in the first year. Then no more Soviet threat (for that matter, no more American imperialism!) and the inhabitants of the western sectors of Hungary, Poland and Czechoslovakia were delirious at their enforced separation from the USSR—even though they lost half their friends and kin in the process, and the tanks of the Soviet-Arab Alliance are parked up against the Barrier in plain view; another reason why we turn our heads the other way! Those may have wiped out the bulk of White Africa and earned our gratitude for it—but alas for Israel and so much else locked up in that segment! Much bloody chaos on our right-hand side, I assure you, which we learnt about from pathetic refugees clamouring up against the barrier with their signs like hitchhikers.

Our left-hand side was a sad case. England, sliced through Greenwich, with the East End of London included in our prosperous Conglomeration as a useless backwater town. The once powerful City of London itself in total decay, and the rest of the country a surly dictatorship obsessed with tilling the land. What else do they have in their segment? A few French fields, most of Spain, the poverty of Morocco, Mali, the Sahara . . . then northwards three quarters of Iceland, excluding Reykjavik: which . . . must be almost totally isolated in a huge ocean along with a knob of Brazil. (I've scraped the blank map off a globe to check—then hurriedly painted it back again.) Hard cheese on our western flank? But we're doing very nicely, thank you, in mid-Euro-Afro. A heaven-sent blessing, the Barriers! So teach Mathematical Religion, count your blessings, don't squint east or west, pray the Barriers stay up. Don't ask who put them there. Say it was God. Or Allah. Or Forest Head. Some Alien Superbeing. Or even an all-too-human ABM Doomsday System. Paint the Globe black, except for your segment. Fine it down to a single steel bow-belly of a world.

THAT MIGHT BE ALL RIGHT FOR SOME PEOPLE!

All segments have to come together at the Poles. They must join together there. The Church has suppressed all mention of flights to the North or South Pole, to see. But there must have been flights. I'm highly suspicious about this silence.

So how about seeing for myself?

Not so impractical as it sounds. I can emigrate North. They need skilled labour in the Euro factories. Then, even if I have to hijack an airliner, we shall see what we shall see! Screw the Church, screw the Censorship. I'm for Truth. Me, OBI Nzekwu!

There must be others like me.

A TALL Negro wearing a lightweight Euro-import suit that had come by lorry convoy all the way down the Sahara highway, with the segment emblem of the Church of Mathematical Geometry in his buttonhole, having thrown up his teaching post in the hot prosperous market city of Onitsha

on the banks of the Niger, climbed aboard a lopsided mammy-wagon with the legend *SEARCH YOUR SEGMENT FOR SUCCESS!* painted along one side.

At Lagos he signed on with a Ruhr recruiting agency, receiving a one-way ticket to Euro in return.

The Garvelle flew due north across the great desert, the glass walls still hundreds of miles distant on either side, though he imagined them progressively narrowing the further north they flew.

His seat neighbour was a Hausa similarly bound for a Euro factory, who confided that he had taught in Koranic School once. He too wore the segment emblem now.

'How could I go on bowing to Mecca?' he asked sadly. 'Mecca is gone. The Kaaba, the Black Stone, is forever black and vanished.'

'The war to our westward was followed by nuclear explosions in the Arctic Ocean. Maybe the Other Russians were trying to blast their way through the Wall in retreat? Nobody really knew.'

'Maybe it's a test of faith?' suggested OBI buoyantly. 'Besides, you never really bowed to Mecca. Not accurately. Did you ever take the Earth's curvature into account? Your prayers were forever flying off at a tangent into space.'

'In that case, maybe they were heard. By whoever it was. At least it has made the world a pleasanter place.'

OBI was on the point of asking, 'how do you know?' when he realised that for this man as for so many others the word *world* simply meant segment nowadays. Life was fine in mid-Euro-Afro so long as you didn't think of the exigencies of the westward, or the bloodshed to the east . . .

I LOST my love when the Walls came down. He was left on one side, I was on the other. We'd even been holding hands a moment earlier. An inexorable force squeezed us apart. His hand became rubber then jelly and slid away to join the rest of his body *over there*. Let me remember this moment carefully. We were all taken by surprise. Taxis were crashing headlong into the sudden invisible obstruction. Such chaos and fire and broken vehicles and bodies. At first we all thought it was an earthquake. So we tend to forget certain things. Such as this very important fact: of what exactly happened to human beings such as Ichiro and I, who weren't riding taxis or trains but only standing quietly, a little apart, but in love, hands joined.

I felt a repulsion. Not *emotional* *disorientation* *the* *over* *the* *repulsion* *the* butterfly feels for the chrysalis it separates from. Ichiro's hand seemed to become a pseudopodium—a protoplasmic tentacle thinning out and flowing back towards his body. A rope of cells. Then a string, a gossamer. Then nothing. Whereupon suddenly it was a proper human hand again, beating on the glass between us. I repeat, it's only an impression, this. Perhaps I was hysterical. So much noise and a crang of taxis and the suddenness of it! But I really think the Walls weren't designed to hurt us individually in the flesh if we were just standing about quietly, in love for instance.

I think of them as an experiment—a test, like an entrance examination. In my case, of Love. In other cases (there must be others), of human will, or dedication. Of the fine human qualities.

So, when we found we couldn't speak to each other, Ichiro and I, because this Wall was a wall of silence too, we scribbled characters in the air to make our minds clear to each other. Easy enough for we Japanese. We were used to misunderstandings, ambiguities in our words, that can only be cleared up by the invisible smoke signals of Chinese characters traced in a coffee bar in the street, in a bus, upon thin air by our fingers . . . We vowed, by that means, to make our way to where the Wall ended, and be reunited.

It was to be our quest. There was a sense of *chivalry* about it, in spite of the burning taxis and the fires spreading to the wooden houses. We'd both been students of European Literature at the University, as well as lovers, and here was the impossible love quest given us in the very heart of Greater Tokyo (strictly speaking, the petrochemical-infested bay area—since The Wall came into being on the outskirts of industrial Funabashi). We seized this task gladly, as a goal.

I did, at least, I believed Ichiro. Alas—or is it really alas?—there's only the gift, the pure idea of the quest itself, to believe, since he deserted me firmly and callously after a few minor problems of travel arose, on his side . . .

Really, I don't care! I lost my love—the day the Wall came down, but didn't lose Love itself. I am, like Marie-Henri Beyle (better known as Stendhal), 'in love with Love.' Someone will meet me where all the Walls meet. He will be the one who *deserves*.

Ichiro's excuses! Outside Otawara, our last meeting: the city on my side, paddy fields and vegetable patches on his . . . We stood on the useless railway tracks, scribbling whiffs of words in the air, and he said he was being drafted into the army. Did he mean the Self-Defence Force? No, he said Army and sounded proud of it, quite changed from his former pacifist self into an old-style classical soldier. What did he say all the young men were in the army for? A war between China and Russia, no less. Shanghai, Mukden, Changchun and Harbin, together with the North Koreans, were fighting an alliance of Seoul, Vladivostok, Manila and the Greater Japan. He seemed to have fallen right back into the 1930s! Our own Japanese-Australian-Siberian Co-Prosperity Alliance is far more modern and civilised. I shrugged off 'patriotic' excuses, and hurried on north. We had the freedom to pursue or live the way we wanted to in our democracy.

So I, Hiroko Chiyoda, had little difficulty making my way up the Narrow Road to the Deep North, as did the poet Basho before me: through the Tohoku Region, across Hokkaido island, then on to Russian Sakhalin with



GIORGIO CERRETELLI

its densely-wooded southlands and bleak northern tundra; thence by fishing boat across the Sea of Okhotsk to the city of Okhotsk itself (though Basho never came so far).

There in Okhotsk sadly I had to linger a long time working in a grim Russian berthall (or *Pevenoy Bar* as they call them). Earning my living other ways too. Yet always thinking of Love, whatever! The War to our westward was followed by nuclear explosions in the Arctic Ocean. Maybe the Other Russians were trying to blast their way through the Wall in retreat? Nobody really knew. But as radioactivity spread through all the East Siberian Sea, travel was forbidden; and I would have to wait for the radiation to disperse before I went further north. I thought: if radiation can penetrate the Wall, so can the outpourings of Love! Over the next few years I almost became a native of Okhotsk, except that I never could forget the Stendhalian 'pursuit of happiness'. I, Japanese Hiroko, dwelling in Okhotsk among rough samens, an amorous egoist biding my time, yearning for my soulmate . . .

AFTER his year in the Ruhr factories producing machine tools, Ohi Nzekwu succeeded in being transferred to the meteorological station on the island of Spitzbergen thanks to his knowledge of trigonometry; and shivered through one long winter till on a late spring morning, as migrating birds settled down to land from Sweden and points south, he stole a plane equipped with six instead of wheels and headed forbidden-north . . .

At last travel became possible again and Hiroko Chiyoda, through her connections with a certain Party dignitary in Okhotsk (and fluent now in Russian) became catress on a Soviet icebreaker stationed, somewhat impotently, in the estuary of the Indigirka River facing Arctic waters. The *Marshal Grechko* was of the latest design (of seven years previous), with helicopter and spotter plane on board.

The Western War had seemingly ended in a stalemate, with Korea reunified from the North, the Chinese occupying the whole Khabarovsk area as far north as the Amur River, and Greater Japan helping the shattered Soviet hold the line to the north of them, while in the far south, with the help of the Darwin Australians, she was building overspill cities along the Timor Sea. (These suppositions she gleaned from her friend in the Party, just before joining the *Marshal Grechko*.)

Six months later, while they were cruising north of Faddeyev Island, having familiarised herself with the workings of a spotter plane and even flown out over the sea once with the Lieutenant-Navigator who'd become her new *ami*, she took off at dawn, alone, humming a lullaby about a cat.

The pursuit of happiness possessed her once more.

SOMETHING was black, at last, in the distance in all this white of ice. A spot, no more, at first, so that Ohi rubbed his aching eyes doubtfully, afraid it was an illusion brought about by staring too long. Then he sensed the closing in of the great Barriers on either side—sensed, more than saw, at first. Air pressure rose sharply and there was sudden turbulence—resistance, even, from the sky. Soon, auroral effects were visible in a V-shaped wedge ahead, and he actually saw the translucent sky-high walls tinted with a faint blush of rose, a hint of violet, a cellophane amber. However the plane was bucking and yawning too dangerously to trust it any further. Taking a last hard look at the (by now) black cone, he set his machine down on to the snowfields, bumping and bouncing over ridges to a halt. When he climbed out, he could still see the cone, but illusion twisted it into a tiny black man's face seen through the wrong end of a telescope, set in an immense bundle

of white clothing. It wouldn't come clear. He couldn't judge distance properly so that it could have been any way away or any size. Besides, those auroras were playing tricks with the periphery of his vision, spooks lurking in an invisible forest behind glass trees whose height was awesome. He felt scared, but set out, goggled and wrapped—the air pressure mounting, forcing cold oxygen into his lungs, that at least invigorated him.

Ohi passed one ditched, abandoned airplane, then another. Snow had drifted over them, hiding them, and he wondered why it hadn't hidden that black cone similarly. Scooping snow off the wing of a plane, he watched it wander back along the ground as though magnetised. How many ridges and hummocks had vehicles of one sort or another, camouflaged by snow?

Doesn't the Polar ice-cap float on the sea beneath? Doesn't it swing round slowly? Shouldn't these planes have drifted south (for everywhere was south from here)—in some direction or other? Were the Barriers holding the ice-cap locked in place?

He wondered, but came up with no answers except that the black thing ahead must be the Alien Apparatus. The Doomsday Device. The Machine.

It was a full cone intruding upon all the Barriers.

Yet its base looked so irregular: indented and uneven. Segmented too, a set of rough wedges arranged in a circle. The top half of a black fruit, broken up and put together again carefully with gaps.

This was a Machine.

Why not? Why assume that all machines have to be gleaming steel and aluminium?

But then Ohi saw what the mound was.

Bodies.

Piled up fifty feet above the snow.

A separate wedge for each segment where the Barriers converged.

Bodies. That had scrambled over each other, to reach through—and made a pyramid of themselves.

Bodies, which the snow left alone.

Ohi touched one with his gloved hand. It came away covered in a fine black grit. The body was frozen hard. Even its clothes were sheets of steel. He tugged at it, to see its face, but it was too tightly locked to all the others that had climbed the slope before it—and, indeed, become the slope.

**'Then he sensed the closing
in of the great barriers on
either side—sensed more
than saw at first. Air
pressure rose sharply and
there was sudden turbulence
—resistance, even, from
the sky.'**

CAUTIOUSLY, Hiroko set foot on the forty-five degree incline of rigid, gritty corpses. Whatever fate had overtaken them, she was sure would spare her. The cone shape reminded her so strongly of Mount Fuji, and even the black ash covering it was so reminiscent of a miniature Fuji, that she felt an instant surge of affinity with the mound, as if it belonged to her, had been waiting for her steps alone.

Something had electrocuted them. Something had shocked them to death. Something that deposited this volcanic grit as a byproduct . . .

She climbed to the summit.

And there found a man whose face was black standing looked at her. She thought he'd just been killed—electrocuted, blackened—and hadn't fallen yet. Then he grinned at her, and she realised that he was *Love*: the black prince of her quest.

He said something. His lips moved but she heard nothing. His hands gestured that he couldn't hear her, either. Impatiently, both people thrust their way into the final shimmering gap where all the segments met.

She felt her shoulders pinched; had to turn sideways, to force her way a little further. The glassy walls pressed painfully on her chest and back.

He too elbowed towards her strenuously, like someone swimming through thick jelly. Reaching out his hand to her.

Abruptly, briefly, both people seemed to become pseudopods—protoplasm flowing out, and through each other's streams. There was a twisting lurch of the guts. An instant in which his heart brushed hers, and their heartbeats meshed.

Then, a moment of discontinuity and she found herself standing with her back to him, staring down the far side of the cone.

At the same instant as Hiroko, Ohi swung round crazily. Both stared horrified across the glassy gap that still separated them.

She started screaming at him. In Japanese, Russian, English, French. He howled English and Ibo and German at her. They only heard the noise of their own voices.

Already the walls were shimmering and squeezing at them. Air pressure became intolerable: an irresistible pillow forcing them back down the body mountain, to lose sight . . .

Ohi ran far out on to the snow fields: far enough out to be able to see past the cone to the far side, where she should be by now. He halted, ice aching in his lungs. Only the cone and the white field round it were visible: no sign of any Japanese girl. He waited half an hour—an hour—till he had to walk away, or freeze.

He fled through the curiously magnetic snow, hunting for a buried airplane or snowmobile, wondering what segment of the world he was in now . . .

HIROKO had halted near the base of Mount Fuji. Taking her gloves off, she numbly fumbled a cigarette lighter from her pocket.

So electric, the air? So tender dry! So combustible!

She flicked the lighter . . .

The Walls shimmered briefly—acquiescently, appreciatively. ●

By Julie Davis

ICA SF 75

SFM Vol 1 No 12 gave details of the sf events being arranged at the Institute of Contemporary Arts during January, February and March. Additions to the list of celebrities who will be lecturing include: Thomas M Disch, Professor John Taylor, Dr Edward de Bono and Alvin Toffler. The film shows will take place on Tuesday evenings, the lectures on Wednesday evenings and children's events on Saturdays. On view in the foyer and on the concourse will be a special exhibition of some of the paintings submitted to the SFM Painting Competition and an exhibition called *Designing the Future* prepared by Ravensbourne College of Art and Design. Further details are available from ICA, Nash House, 12 Carlton House Terrace, London SW1T; telephone 01 930 6393.

London Libraries

Two public libraries in London are organising sf events at the moment. If you manage to read the before the end of January you may catch the exhibition being held at West Norwood Library; it's open from 9.30 am to 8 pm Monday to Friday and 9.30 am to 6 pm on Saturday, but it finishes on 1 February. However, if you miss it there you may still be able to see it at the Carnegie Library, Herne Hill, from 10-22 February. The exhibition can be visited between 3 and 8 pm on Mondays and Wednesdays, 11 am and 6 pm on Tuesdays and Fridays and 9 am and 5 pm on Saturdays. Admission is free and the exhibition takes the form of a display of books accompanied by a bibliography, and there will also be a graphic display of some kind.

Battersea District Library has also arranged an sf event which takes the form of a series of film shows, about one every fortnight. Unfortunately it started in November but it does continue until March; as well as showing classic sf films, on 22 January *James Bligh* and on 5 March *Chris Priest* have been invited to speak. Information about this can be obtained from Sue Smythe at Battersea District Library, Lavender Hill, London SW1T; telephone 01 228 8899 X478.

North East SF Group

Following the success of *Tynecon 74*, last year's British Easter SF Convention, held in Newcastle, the North East SF Group have decided to hold regular meetings for local fans. Three meetings have already taken place but details of any still to come can be obtained from: Robert Jackson, 21 Lyndhurst Rd, Benton Newcastle upon Tyne, NE12 9NT. Most of the discussions will be open to anyone, including non-members, but if you want to attend the film shows you'll have to join the group. Fees are 20p for an individual meeting or £1 for a year.

Hugo Award Winners 1974

Novel: Rendezvous with Rama by Arthur C Clarke. Novella: The Girl Who Was Plugged In by James Tiptree. Novella: The

Unpleasantness That Will Surely Happen by Robert Silverberg. Short Story: The Ones Who Walk Away

From Omelas by Ursula K Le Guin. Fantasy: *Algor*. Fan Artist: Tim Kirk. Pro Artist: Kelly Frass. Pro Editor: Ben Bova. Fan Writer: Susan Wood (Glickson). Dramatic: Sleeper from Woody Allen. JW Campbell Award: Spider Robinson & Lisa Fantasy. Gandalf Award: JRR Tolkien.

Special Effects Season

The National Film Theatre in London has arranged for a special season of films to be shown featuring special effects in the cinema. It will be held in February and March and coincides with the publication of *John Brosnan's Book Movie Magic* which is on the same topic. Several sf films will be shown including: *The Lost World (both versions)*, *The Man Who Could Walk Miracles*, *The Quatermass Experiment*, *Dr Cyclops*, *The Invisible Man* (returning to 20,000 Leagues Under the Sea, *War Of The Worlds*, *Silent Running*, 2001: A Space Odyssey, *When Worlds Collide*, *Ten*, 20,000,000 Million Miles To Earth and a new Japanese spectacle—*The Submersion of Japan*. Details of membership and dates of showings can be obtained from the NFT, South Bank, London, SE1; telephone 01 928 3232.

Film News from John Brosnan William F Nolan's *Logan's Run* has finally been made by MGM (George Pal tried to make it several years ago but failed to get the necessary backing) and was due for release in America last year. It is set in a future world where all people over the age of 21 are exterminated by a computer. One of the exterminators, himself 21 years old, decides suddenly that the system has its drawbacks.

The makers of *Enter the Dragon*, the Bruce Lee epic, have gone into the science fiction field with a Warner Brothers production called *The Baron*. It stars Yul Brynner as a rebel of the next century.

Robert Clause directs. Columbia have released in America, a science fiction film called *Chosen Survivors*. It concerns a group of people chosen by a computer to survive a possible atomic war. They are taken to an underground 'base' where there they are exposed to a number of dangers arranged by their scientific manipulators, but of course things start to go wrong...

Director Jack Gold (noted for *The Bad Guy* and *The National Health*) has made a film version of the Algis Budrys novel called *Who?* A scientist is injured in a laboratory explosion in Germany. He is saved by East German doctors who provide him with a metal head. He is sent back to West Germany where the suspicion grows that perhaps the American scientist is really dead and the man with the metal head is a spy...

Further news on *Star Trek*: there are plans this year to produce a made-for-tv film of *Star Trek* using as many of the original cast as possible, although it doesn't look as if Leonard Nimoy will take part. If it proves successful they plan to show a one-end-a-half hour *Star Trek* tv film every three weeks... a similar format to the Colombo, McClood, etc. tv series.

BOOKS

Reviewed by Peter Meador
THE ENCYCLOPEDIA OF SCIENCE FICTION 9

FANTASY, Vol 1
Compiled by Donald H Tuck,
Advent Publishers, 1974, \$30.00

THANKS TO SFM we've already learned of *EE Smith's* interest in doughnuts. But if you know that Harlan Ellison was once a bookies' runner, Ray Bradbury sold newspapers, and that Marion Zimmer Bradley has been a target for a carnival knife thrower? True enough, although these somewhat irrelevant details are the most important part of the vast mass of information contained in Donald Tuck's monumental *Encyclopedia of Science Fiction & Fantasy*. Volume 1 of which has just been published by Advent.

Like Asimov's better-known *Encyclopedia Project* this one will take some time to complete, with the next part due out in about eighteen months and the final section a year or two after that. The first two books contain a series of biographies of authors, anthropologists, editors, artists, etc, while volume III will deal with the magazines, paperbacks, pseudonyms, publishers, and lots more.

The present work contains nearly 300 large-size pages from A-L, and looking through was like being overwhelmed with fascinating notes about the personalities in our field. Lin Carter becomes 'Carter, Lin (wood 'vroomen)', Lester del Rey becomes 'Lester del Rey, Juan Mario Silvio Enrico Alvarez-del Rey'; and even Benjamin Disraeli has an entry to cover his collection of eight fantasy tales, published in 1934.

Over and above the biographies are hard facts; information on every author's work, including their series, hardbound books, paperbacks (with synopses of plots and foreign editions), non-fiction works, and anthologies, listing the contents of every one. Thus Isaac Asimov has two-and-a-half pages, Heinlein and Clarke have nearly three each, while the record-holder is August Derleth, who then according to Tuck he started writing at 13 and eventually had around 4,000 short pieces in some 400 different magazines!

In short the *Encyclopedia* is an awesome work of reference and enjoyment and it is the fruit of over twenty years' labour by the compiler, made all the more remarkable because for all of that time he has lived in Tasmania, hardly the centre of the science fiction world.

There's simply no argument; anyone who takes this sf seriously (and most SFM readers do) must have this book. Sell your shirt, pawn your watch, and buy it. And Volumes II and III will really be worth waiting for.

(The *Encyclopedia* can be ordered from any of the speciality sf bookstores, or direct from Advent Publishers, PO Box 2228, Chicago, Illinois 60630, USA.)

THE COSMIC CONNECTION by Carl Sagan

Hodder & Stoughton, £3.50 NOW THAT'S extraordinary. According to the astronomer Carl Sagan it would be quite easy to detect the presence of life on Earth from the planet Mars, invisible photographically but revealed because of the one-part-per-million of methane in our atmosphere. The principal habitat of methane bacteria, incidentally, is in the stomachs of bovine animals. Thus, says Sagan, we would not ordinarily consider the fattulence of cattle as a dominant manifestation of life on Earth, but there it is!

This is a typical example of the 'very bad news with which the author presents some really

fascinating cosmological facts. Not that the item quoted is particularly important; more of a throwaway aside to the chapter titled 'Terraforming the planets', which then goes on to discuss schemes such as 'seeding' Venus with algae to produce an oxygen atmosphere, installing an enormous orbiting mirror to warm-up Mars, and colonising the asteroids.

Now wait a minute; this is a serious, non-fiction book by a respected scientist? Discussing these way-out science fiction ideas?

That is part of the measure of the changes in attitude which have followed our first steps into space. I can remember (he says, stroking his beard) when the very idea of a moon landing was sneered at; now, the Establishment seems all too keen to expurgate its concepts and its very terms (like 'robot', 'terraform') with never an acknowledgement.

Have you noticed, for instance, the way the papers still say things like... as—as if it was thought to be mere science fiction until Dr Smith actually made it work... ignoring, it seems to me, that 'mere sf' had the foresight to predict something which scientific orthodoxy was unable to see. Ah, this is a thankless calling to be a prophet!

Not that Sagan has jumped on any band-wagons—he is more likely to have set them rolling in the first place, and he has directly influenced the thinking of sf authors like Larry Niven, for one example.

This brilliant young astronomer has had the good fortune to have guessed right on half a dozen occasions, and seems to have an almost uncanny knack of getting involved with all the most exciting projects of the space sciences.

For instance he is intimately concerned with the various NASA probes of Mars and was busily analysing the famous 'dust-storm' pictures from Mariner-9 as they came in. He was on hand for experiments to try and duplicate the origins of terrestrial life; designed the plaque for Pioneer-10, first man-made object to leave the solar system; has communicated with dolphins, worked on sending radio messages to other stars, and was consulted for 2001: A Space Odyssey.

Sagan himself knows how fortunate he has been; he says in his preface, 'even today there are moments when what I do seems to me like an impossible, if unusually pleasant dream'. And in his book he manages to convey the excitement and wonder of all these researches, and more besides.

Chapter headings will give some idea of the flavour—'Beginnings and Ends of the Earth'; 'Astroengineering'; 'Venus is Hell'; and 'A Search Strategy for Detecting Extraterrestrial Intelligence'.

This is genuinely one of the most remarkable books to come into my hands for many years.

Profusely illustrated, it generated most ideas, most of that elusive 'sense of wonder' in me than has almost any sf novel I can name.

Carl Sagan, you are a very lucky man.

FREE POSTERS: The poster offer in SFM Vol 1 No 9 is still open and you can still demand has exceeded the supply. Reprinting has just been completed and you should receive your posters any day now. Sorry for the delay.

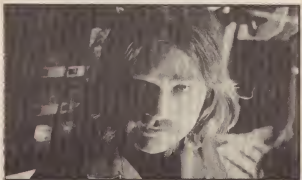
Dark Star is a unique science fiction film for several reasons. First of all, its visual quality and special effects almost rival those of 2001: A Space Odyssey. Secondly, it's a very funny science fiction film which makes it something of a rarity, and thirdly, and most interesting of all—it's an amateur film made by a group of students at the University of Southern California. Now the term "amateur" when applied to filmmaking usually conjures up images of films with fuzzy photography, bad acting, make-shift sets and immature script-writing but, happily, none of these faults are to be found in **Dark Star**. On the contrary, it is probably one of the best science fiction films to be made during the last decade.

Dark Star is full of cinematic science fiction devices, cinematic as well as literary, such as talking computers, alien creatures, meteor swarms, suspended animation, hyper-drives, etc, but the film succeeds in turning all these familiar things upside-down and treats them in a fresh and very amusing fashion. It is no exaggeration to describe it as a more effective science fiction spoof than Woody Allen's film **Sleeper**, which won a Hugo as this year's best science fiction dramatic presentation... and that's saying something.

Dark Star is the name of the spaceship in which four men are roaming about the universe on a long and boring mission. Their job is to find 'unstable' worlds, that might one day collide with a star and thus cause a super-nova, and destroy them with 'thermosteller' bombs. They've been doing this for a very long time and the rot has begun to set in. Things are breaking down... the talking computer, which has a voice similar to that of the Marilyn Monroe, is having trouble controlling the ship's vital life-support systems. To add to its problems the bombs used to destroy the worlds are also intelligent and have voices of their own—and one of them just threatening to explode ahead of schedule, which means the computer must know

DARK STAR

FILM REVIEW BY JOHN BROSNAN



persuading it not to. The crew's sleeping quarters have been destroyed by a meteor so the men are forced to sleep together in an empty cabin which resembles a hippy hide-out—dirty mattresses on the floor and slogans scrawled in paint all over the walls.

The men themselves are also beginning to break down. One of them spends all of his time in the observation dome staring at the stars, another, an ex-surfer, yearns for his surfboard and Malibu Beach. The other two are becoming increasingly paranoid. A fifth member of the crew, the former captain, has been killed when his control panel blew up. Though technically 'dead' he has

been frozen and stored in a cryogenic tank and the crew can still communicate with him, by means of electrodes implanted in his brain, when emergencies arise. Not surprisingly, he is not overly concerned with the problems of the living and would much rather talk about his favourite baseball team.

Also on board is the ship's mascot, a rather nasty alien creature that resembles a large beach ball with claws. One of the crewmen, Pinback (played by Dan O'Bannon who not only gives a fine comic performance but who also designed and handled the special effects), spends a good part of the film trying to recapture

this murderous 'pet' after it gets loose in the ship. He finally shoots it with an anaesthetic dart-gun, only to have it explode and whizz about the cabin like a punctured balloon.

This symphony of comic disasters reaches a crescendo when everything in the ship goes wrong at once—leaving one of the talking bombs outside the ship and ready to explode. This time the bomb is determined to go off and ignores the computer, so one of the crewmen goes outside the ship in an attempt to argue it out of exploding by the use of phenomenology. This has both tragic and hilarious results.

Dark Star, which has been described as 'an absurdist comedy, a sort of *Waiting for Godot* in outer space', cost just over \$5,000 to make. For a film that often looks as lavish as some of Hollywood's most expensive productions, that's an incredibly small amount. It was the brainchild of John Carpenter who produced, directed and also wrote the screenplay. He started planning it in 1970 and shortly afterwards interested Dan O'Bannon, actor and film student, in the project. For the next three years they spent all their spare time working on the film, financing it out of their own pockets. They were influenced by 2001: A Space Odyssey as far as the interior design of the spaceship and many of the exterior shots were concerned but, O'Bannon maintains that the talking bomb, one of the film's most fascinating devices, was not based on HAL 9000 but on an old idea of his own.

The **Other Cinema**, who own the rights to **Dark Star** in this country, are currently negotiating with a distributor and are hopeful that the film will have a release in England sometime in 1975. It is also likely that the film will be included in the National Film Theatre's Special Effects Season to be held in February and March this year. It is definitely a film that all science fiction fans should go out of their way to see. After **Dark Star** it will be hard to watch any other science fiction film with a straight face.

Crossword Competition No 4

Win a copy of NEL's New Hardback 'The Eyes of Heisenberg' by Frank Herbert. All you have to do is complete the crossword and send it in with the entry form. Prizes will be awarded to the senders of the first three correct entries opened.

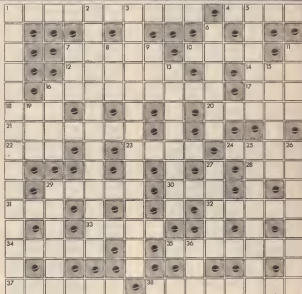
RULES

- All entries for the competition should be accompanied by a completed entry form and sent to: The Editor, SFM Crossword Competition, Barnard's Inn, Holborn EC1N 2JR, to arrive not later than 11 February 1975.
- Entries should be sent in an envelope clearly marked 'SFM Crossword Competition' in the top left-hand corner. Those who do not wish to cut their copy of SFM may draw the frame onto a piece of plain paper and send that in instead.
- The winners will be notified as soon as possible after 11 February 1975 and their names published in SFM Vol 2, No 4. The editor's decision must be accepted as final.
- The competition is not open to employees, their parents, spouses or children, of New English Library.

CLUES ACROSS

- Morpheus's Karmagun counterpart. (8)
- (and 28 Across) Editor of *New Writings in SF* (1,7).
- French author of many of novels. (8)
- See 7 Down
- Where the moon is furthest from the Earth. (5)
- A minister of, in Tolkien, a servant of Sauron. (3)
- Planetary metabolism. (9)
- Ry (3)
- Interstellar journey, abbreviated. (1,1,1)
- Friendship. (5)
- One haunting Texas? (7)
- Vegas. (3)
- Journey --- - Down by Frank Belknap Long. (5)
- The sixth in Lotz. (4)
- Common abbreviation for a flying saucer (1,1,1).
- One of the creases of the moon with which craters best resemble. (3)
- An eye. (3)
- A distorted her valley. (3)
- A constellation. (5)
- American author of *The Seven Seas* and *Time at Antares*. (4)
- More than 25 Down's first term, in good

- time. (5)
- See 4 Across.
- Could be a solar one. (8)
- Descendants of the Milky Way, for instance. (8)
- CLUES DOWN
- Author of *The Rays*. (2,1,7).
- Title of a book by John M Hammon. (2,6,4)
- Another book by T. Down. The - - - - - (4,2,8)
- Some eight-infrared creatures. (8)
- Creator of the *Garfield*. (5)
- (and 10 Across) Surname of the author of *The Goat of Africa*. (3,4)
- Pardner. (5)
- Shopy customer. (3)
- To get into the crystal. (4)
- Take two off the score for this. (8)
- His was the title of a book by Kath Laurus. (6)
- The planet of these was a popular of film. (4)
- Health resort. (3)
- The hero of EC Tabb's current series. (8)
- According to *Stuck*, the end of the Universe. (8)
- Palindromic detection device. (8)
- One of the signs of the Zodiac. (6)
- - - Path of Great by Simek. (2)



SFM Crossword Competition No 4

NAME

ADDRESS



Now you can laugh at skinny weaklings



How do your muscles measure up?

QUICK MUSCLE BUILD-UP ENSURED

Built-in POWERMETER

Measure your increased strength from the very first day. Check the reading on the Powermeter scale after each exercise and compare with your performance of the day before. Your strength can increase by 4% in a week, 50% in 3 months.



Now thanks to an amazing invention, the dream of men for centuries can be yours! A quick, effortless increase in muscle power in just a few days... or you pay nothing!

Great artists like Michelangelo and Leonardo da Vinci knew that no man could be attractive and appeal to women without good muscle development. Their drawings searched for perfection.

Now there is an easy way to develop a body women admire. Beautiful muscles on shoulders, arms and thighs; that athletic looking chest and waist; that picture of high potency that spells out at a glance "here is a real man".

You can build the rippling muscles that women admire. Bullworker puts into action the Isometric-Isotonic principles developed by the Max Planck Institute - now used by thousands of men the world over. It provides a complete programme, developing hundreds of muscles in your body.

Works much faster. Just 5 minutes a day with a Bullworker will develop muscles you can measure in

two short weeks - much faster than conventional techniques. And you can check how your strength can increase day by day on the Built-in Powermeter... up to 4% more strength the first week... a staggering 50% improvement in only 3 months.

Easy to use, too! There are no fiddling adjustments to make. You begin with seven easy exercises that anyone can do. And you hold each exercise for only 7 seconds a day. You use only about 60% of your strength. No sweat. No strain. No tiresome repetition. In fact you can complete the whole advanced programme in less time than it takes you to shave.

Fantastic results! You'll build steathard muscles in every part of your body... rippling shoulders... bulging biceps... and a firm, taut stomach. Your husky good looks will be the stepping stone to an exciting new life.

Fitness Expert reveals how these 7 exercises can build you a power-packed body in exactly 49 seconds a day!



Challenge!

Try a 5 minute workout with Bullworker every day for 14 days. If as a result you do not look and feel stronger and more dynamic, simply return the Bullworker to us and your home trial will not have cost you a penny!

FREE 14-DAY HOME TRIAL COUPON

BULLWORKER, Dept 974103
20 St. Ann's Crescent, London SW18 2LZ.

Fill in and enclose when you order!
If you send me a Bullworker 14 days I am not obligated with the result. I will return it post paid and the meter will not register there. Otherwise I will keep it and pay you £25 + 60p p.p.h. at the end of the trial period, followed by 3 consecutive monthly payments of £2.75 each, total £11.00 + p.p.h. Or I can SAVE £2.13 by paying £1.45 p.p.h. at the end of my 14 day trial.

Special fast delivery after SAVES EXTRA 50p.
£21 order to SAVE £2.00 by enclosing cheque (P.O. for £12.50 p.p.h. total) I can receive the Bullworker post paid after 14 days for full cash refund if not enclosed. Cheques/ P.O. payable to Isometric Enterprises.

Your signature _____ Valid only if signed by adult

Name _____ (block letters)

Address _____

500D

BULLWORKER SERVICE,
20 St. Ann's Crescent, London SW18 2LZ.

Printed in Great Britain by Sharncliffe Press, London