

# College backs down over bookstore rent

The College has backed down over plans to increase the rent of the Imperial College Union Bookshop from £4,700 per annum to £19,000. The rent will now be equal to last year's rent plus inflation.

The plan is yet to be agreed, and 'Impact', who represent the College, are still negotiating. College Secretary Mr John Smith, told FELIX 'nobody wanted to do down the bookshop or Union'. He added 'the Union had put more into it than originally thought'. He also commented that 'It's important for the people who run it

commercially to know what a commercial rent is in this neighbour-hood—the space is very valuable'.

The Rector, Professor Eric Ash, justified the change of mind—'It was felt that the higher rent would be unnecessarily hard on the Bookstore', he told FELIX.

Last Friday's meeting between the Union President, Neil McCluskey, Mr John Smith and Professor Eric Ash yielded the draught solution. The original aim of raising the rent was because the old Bookshop was non-departmental—a non-

College based activity' as Impact described it. It was pointed out that Southside Bar paid no rent at all and is even more non-departmental than the bookshop. Impact is an impartial agency, so a rent rise in one sector must be accompanied by a rise in any comparable areas.

Refectories Manager Mr Rob Northey, who is responsible for Southside Bar, commented that any change in the rent on Southside Bar would probably be reflected in bar prices. The Union bar also pays no rent, he added.

See summer news review

## Theft: Hamsoc lose £2,500

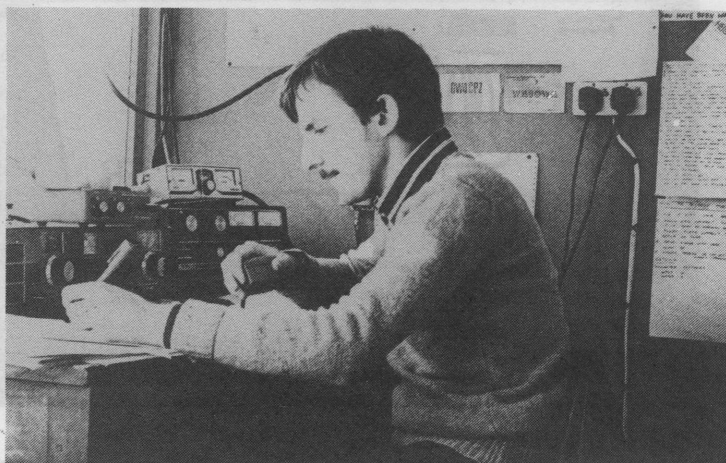
An estimated £2,500 worth of equipment has been stolen from HamSoc, Imperial College Union's amateur radio society. The missing items include transceivers worth about £2,000 and various other equipment, including antennae.

The robbery is thought to have happened sometime last week after electricians employed by the College had been working near the Hamsoc room. It is believed that they left a door open. The theft was only discovered on Tuesday when Hamsoc members started to prepare for the Freshers' Fair.

The Union Deputy President Dave Williams said the articles were uninsured and that 'as far as I'm concerned the College Estates are paying for it'.

The theft occurred during the day, and is thought to have involved a number of trips to and from the room. Dave Williams has now instructed that he be told before a contractor is left in any of the Union Buildings.

Mr Geoff Reeves College Chief Security



Officer, added that no one is sure of when the theft actually took place, but it must have taken some time. He said that the back door of the Union, facing the Albert Hall, is to be fixed with a magnetic lock, but cannot be locked

permanently as it is a fire door.

In a later interview Dave Williams told FELIX that it 'looked like' the door had been left open. 'I believe it is not insured' he added.

## Students to fund College cock-up?

College's residence fund may have to support the £1.6 million Olave House, according to Senior Assistant Finance Officer, Malcolm Aldridge. The House's finances are presently kept separate from the main Residence Account, under an agreement, made between the College and Imperial College Union (ICU), designed to limit rent increases in other residences.

Around £1 million of the cost of the new House was raised through a loan, with the rest of the money coming from the Sherfield Trust. It was decided at the time of purchase to pay the interest on the loan entirely from the Olave House rents, in order to avoid burdening students in other residences. Following the recent interest rate increases, the £50-60 rents

are no longer sufficient for this and the loan is steadily increasing. It has also been estimated that the value of Olave House has fallen to £1 million, in line with property price trends.

Commenting on his policy toward rent increases, Mr Aldridge told FELIX 'My objective is to keep pace with inflation' but did not rule out the possibility of increases greater than the rate of inflation. If Olave House is added to the Residence Account, all rents may see a substantial rise in order to ensure that the House breaks even financially.

College Secretary John Smith denied that there are any plans to bring Olave House into the Residence Account. He stated his intention to uphold the College's agreement with the

Union and said that he thought Olave House rents are 'about right for the nature of the accommodation'.

Mr Smith, who recommended the purchase of the House to the Sherfield Trust, remarked 'I still think it's a good buy in the long term'.

Neil McCluskey, Imperial College Union President, reacted with surprise to the proposal that Olave House should be financed from the general Residence Account. 'I will stick to any agreement made and I do believe that the agreement was that any residence bought after Fisher Hall would be kept separate from the Residence Account', he said.



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Graham Swannell's

# Marrakech

LYRIC  
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Tel: 01-741 2311 for further details

Every once in a while it is fun to remind yourself how abysmal a play can be in order to fully appreciate just where the proverbial bottom of the barrel lies—and Graham Swannell's latest play is it.

If you picture the most tedious middling middle class sit-com you have ever zapped then this is it without the benefit of a remote control or even indeed of an interval (a wise tactical decision.)

Walter, a failed landscape architect finds himself in the position, obviously 'humiliating' and 'comic' for a professional man such as he, of playing househusband to Vivien his wife—a minority survivor as a doctor still loyal to an ailing NHS (and very SDP with it).

At the start of the play Walter has decided to hang up his rubber globes and escape to the red walled city of his shattered dreams—Marrakech—and write the great naval-contemplating novel that burgeons within. The dreary but stunning Vivien wakes up in search of a coffee and discovering him packing she wonders what all the fuss is about.

The incompetent and illiterate dross which follows plays like an imbecil's guide to a gospel of middle class tenets and truisms. For example:

1. men cannot cook
  2. women can cook
  3. when we were young we were wild
  4. now we are older we are wiser
  5. any aspirations beyond a semi and 2.4 kids are hilarious and silly of course
  6. especially the idea of writing
  7. or come to that of travelling
  8. we must stick together
  9. this is the best of all possible worlds:-
- beautifully captured in the line "you think you'll find



what you want in Marrakech. It doesn't exist, *this* is what exists."

But the most powerful impression that the dialogue gives is that Swannell like Walter "couldn't write a note to the milkman".

Stuck with the script though one might expect that director Peter James would attempt for the sake of pride to do something with it. His attempt to convince the cast that the dialogue is of this planet has however obviously failed in Morag Hood's case as she sleepwalks Vivien's part in a painfully droning monotone (throat problems perhaps?). Consequently Gregory Floy's valiant attempt to make something of

Walter is lost in an alternate recital of lines that could never pass for conversation. Jokes fall flat and communication between characters and to the audience never begins to be established.

The play is as desperate as the NHS for some immediate life-saving action:-

Either a radical shake up to send up the flimsy and hackneyed script or a serious investment of energy to play up the pockets of humour. Since neither of these seems likely, the play, like Walter's life, will speed towards its date with oblivion; "Hardly alive and then dead forever". May it rest in eternal peace.

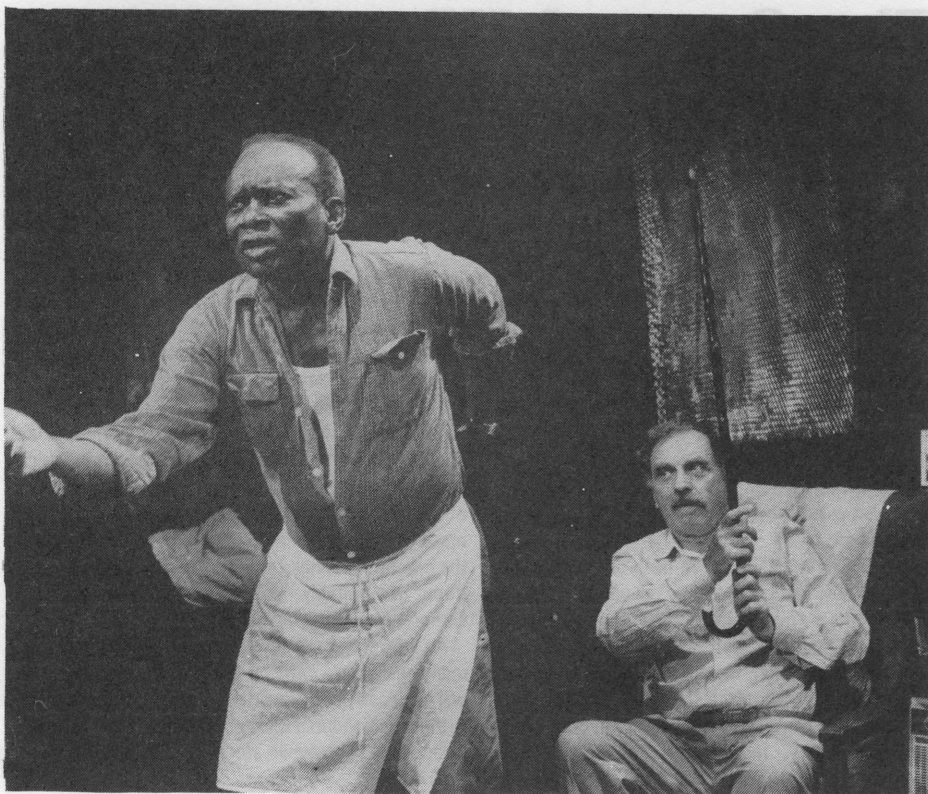
MAC.

Robert Royston's

# The Struggle

THE GATE THEATRE

Tel: 01-229 0706 for further details



Amidst the vague propoganda and political cliché which blunts the brutal reality of life in the South African Republic *The Struggle* insists itself as an intelligent and focussed tale which stabs with convincing precision.

Ruth has long ago left South Africa and the island of appropriated wealth that was her father's home, for London and the bloated amnesia of a busy journalist's life. Ruth's widower father languishes, from the loss of a dead wife and deserting daughter, in the confused mausoleums of both house and fragmented mind erratically issuing orders to and demanding company from the long suffering servant Tim. But the deep draughts of exile are hardly the waters of Lethe and Ruth is driven by conscience to return, ostensibly to visit her father, in reality to do work for *The Struggle*.

A violent and compelling history of events unfolds, alternately cut with the present interrogation of discovered-subversive Ruth by the sadistic Colonel Van Zyl.

The callous engineering of the murderous ending is powerfully conveyed by a chillingly routine radio announcement and the piece closes with a sense of foreboding and imminent conflict.

The distinguished cast deliver confident performances with Osei Bentil (*Othello* at the Albany) bringing great humour and vitality to his role as Gumede—the fatalistic young township activist.

MAC



## Second Fiddle

Mary Wesley  
Pub. Black Swan £3.99

Afficionados will not be disappointed by Mary Wesley's latest offering in paperback. Not only does it afford us another glimpse of Calypso Grant, on whom the curtain was lifted in *The Camomile Lawn* and who last played a part in *The Vacillations of Poppy Carew*. It also opens up a whole new cast of quirky characters, in typically vivid colours.

The plot centres on Claud Bannister, 25, unemployed, back at home with mother, dreaming of writing a novel and Laura Thornby, 45 (the ages are important). Exotic, independent and controlled, she runs her own life, enjoys men and discards them (charmingly) before they go sour. Laura takes Claud on, sets him up with a market stall and encourages him away from mother to write. But the relationship does not proceed quite as she expects.

The dynamics of their relationship are played out in a kaleidoscope of scenes which also illuminate aspects of Laura's past and her family, and of Claud's mother's mind, marriage and maternity, as well as introducing a team of comic characters, including the deliciously dreadful Terrence. The novel exposes the process of writing a novel and (with a characteristic turn of wit) the process of writing book reviews.

The language is spare and pungent. The rhythm is irresistible. The characters are engaging, the wit is sharp, the plot is intriguing. Highly recommended.

Lorraine Rogerson.

## The Bellarosa Connection

Saul Bellow  
Pub. Penguin £3.50

The aging memory man forgets the name of the river in the song he learnt as a child. His friend and step-cousin Harry Fonstein has spent forty years forgetting his Jewish origins but trying to thank the man who rescued him from the Nazis, now a successful Broadway producer, Billy Rose (Bellarosa).

Fonstein's wife, the tiger lady Sorella, a Gentile, who has made herself an expert on Jewish history, has the means to blackmail the reluctant Billy Rose into allowing her husband to thank him. She has been given the diaries of a female former aide of the producer, but after confronting him with them, destroys them.

As Saul Bellow gets older his novels seem to get shorter; this one, described by the publishers as a novella, is really an extended short story, with its single theme of memory and its relation to history. The characters are highly drawn, and Bellow eschews plot with a Nobel Prize winner's confidence, but the terse description and dialogue are enough to evoke the America of 'Herzog' and 'Dangling Man'. Bellow's fiction is unforgettable.

Trying to trace the Fonsteins thirty years after losing touch with them, the memory man remembers 'Swannee' (or 'Suwannee'—spelling preferred in the South) and learns of their deaths.

B.A. Costello.

## Job Hunting

Alfred Hassack  
Penguin 'Self-Starter' £3.99

Now that your grant cheque has been pissed away at the Freshers' Week events and you discover that your landlord, one Mr Rachman, is a stickler for prompt monthly payments, it's time to join the pioneering cohorts of nineties students and get out and earn some dosh.

And here's your edge: you're competitors for that sought after post at the local ale house are obviously a bunch of losers who hadn't the wit to prepare for the inevitable eyeball with the boss with the latest self-instructional training in transactional analysis and the high art of fast-talked bullshit. But you, you cunning devil, spotted the glossy cover and blue dotted summary and speedily secured, for a pittance, your key to love life and riches beyond your wildest dreams.

Or so the story goes and a book that can sell itself

well to you promises well that it can then sell you to Mr Big and his merry band of moderately remunerated men. This book makes a fair job of it (pun intended).

Aimed at a broad audience the chapter regarding CVs is a bit of a shock including as it does formats for those various forms of real life without a university education (those who also must work). The subsequent chapters on interview preparation and its pop-psychology are a suitably commonsense pep talk for all those of a thick-skinned/socially incompetent persuasion.

Overall, although quite dispensable as a tool of any great enlightenment the book gives a clear simple check list and serves its intended function to calm and groom the potential victim before the sacrificial presentation to the big bad interview day.

MAC.

## In Search of the Crack

Robert Elms  
Pub. Penguin £3.99

Whatever else this novel's about it is about the fun of camaraderie and the richness of friendship—the pleasures of 'having the crack'. The crack is the crazy spirit of a night hunted down drunk, and drained of its sparkle then thrown to the side with the empties. The crack is the wit of the Irish and the nightly quest of a wide-eyed wide boy from N22 for that elusive something more.

From under-age drinking in a pub in Camden Town through sexual skirmishes in the B&Bs of Bournemouth, Tony is riding the crest of a wave which carries him almost as far as his passionate vague ambitions.

With the wit of Joe Kelly and the sharp edge of bright and bold Diamond, the boys have divined the spirit of the times, or at least of living in London, and in a party of drink, drugs and sounds Pleasure Incorporated is born.

The anarchic crusade of the hedonists' vision is launched, and with a cool mix of blarney and balls the gospel of good time is spread. After London, New York and Tokyo bow to the pirates flag.

Through the dollars and a death and the loss of his English Rose a big-hearted man is made from a bright faced boy. From these fond memories of a lusty life and 'getting drunk in the company of honest men', Tony can now look forward with the contented smirk of a man who has had his cake and still has another slice left.

Better than the blind rebellion of angry young men and brighter than the self destruction of the disillusioned, this novel opens an unseen door in the writing of recent times which leads to a more positive path for those 'In Search of the Crack'.

MAC.

## The Oat and Wheat Bran Health Plan

Dina R. Jewell and C. Thomas Jewell M.D.  
Pub. Bantam Books £3.99

This book otherwise known as Crapping Your Way to Health delivers the final panacea to that gamut of ills peculiarly favoured by the constipated western world such as:

- Coronary artery disease
- Appendicitis
- Colon cancer
- Breast cancer
- Hiatal hernia
- Varicose veins
- Depression

and many more besides. I've been on the diet for a fortnight now and can honestly tell you that in this time I've suffered from none of these ills so that can't be bad for a first indication.

But I should mention, there are certain drawbacks to the plan. The main problem being that the diet consists of lots of visits to the toilet to deposit your new, more bulky, fast transit time, cholesterol removing number twos.

However, this is surely a small price to pay for such a healthy, energising cleansing effect that these little fibrous treats can bring to your life. Or at least that's the message that enthusiast and High-Fibre-Priestess Dina relates in her endearingly spunky American way.

The book is clearly planned and presented and the tone of address is set for an intelligent interested lay audience. From the beginnings of research in Africa on the importance of dietary fibre through a summary of the physical and chemical effects of oat and wheat brans the text leads into the bulk of the book where the practical business of getting the stuff down your throat in a suitably appetising way is covered by a comprehensive list of recipe ideas.

An interesting substitute for the traditional diet of many beers and a curry but whether the medical basis will be wiped out by an article in next month's *Lancet* in the time honoured manner of these things, remains to be seen. Meanwhile stock up on bog roll.

MAC.



*The summer is always quiet according to those who would like to make you think so. But the College tried to pull a fast one on the Union and the Summer Accommodation Centre got washed out....*

# OAP PM saw IC's IRCs

The Right Honourable Margaret Thatcher, MP, visited College on August 25. In a brief interview with FELIX, she explained that she was visiting the College's Interdisciplinary Research Centres, which she described as 'fundamental and very exciting.'

Mrs Thatcher visited two of the College's three IRCs, which will bring a total of £32 million to the College. 'It's very exciting,' she commented afterwards, 'what we do both in the basic and the private research really will have a tremendous effect on the whole future success of our country.'

The Rector, Professor Eric Ash, told FELIX that he had invited Mrs Thatcher to view the IRCs after she had expressed an interest to Professor Abdus Salaam in the Physics Department. The centres are in population biology, Process Simulation and control (Chem Eng) and Semiconductors.

Mrs Thatcher is known to be unsure about the validity of IRCs as a research tool. Professor Ash now believes she thinks 'this is the right way to go.'

Interdisciplinary Research Centres work in an inter-departmental manner, drawing ideas and resources from several areas at once.



## Bookstore lost £75,000

The Imperial College Union Bookstore's losses exceeded original estimates by £75,000 when a full stocktake was held during the Summer.

The amount was made up by unsold books which could not be returned to suppliers. Past stock valuations had quoted non-returnable, out of date textbooks at full price less a profit margin. An example quoted was 'A history of Persian Earthquakes,' which was valued at £50 in the accounts and was selling

in the Bookstore at £10-20.

The loss was originally higher, but was reduced by the return of £25,000 worth of books. It came as an addition to the Bookstore's £30,000 overdraft and the Union's £67,000 refurbishment costs.

Union Manager, Dave Peacock told FELIX that he did not expect the Bookstore to repay the debts for ten years.

## UFC success

Imperial succeeded in gaining a nationwide top research ranking in all of the departments reviewed by the University Funding Council over the summer. The new ratings placed IC 3rd in the national table of Universities with 91.25% of the possible marks.

The UFC now aim to give a double weighting to research excellence, which Professor Ash expects to provide a 'sizeable fraction of a million (pounds),' in future years. 'It won't drastically change our fortunes overnight,' he added.

## Impact hit Bookstore

The College increased the rent on the Union Bookstore from £4,700 to 19,000 when its rent negotiators, 'Impact,' were employed to arrange an 'arms length' agreement between the Union and the College.

College Secretary and 'Impact' director, John Smith accepted that the new rent was 'a bit tough on the Bookshop,' but added that the new arrangements provided 'much sharper objectives.'

With a good year, Union Manager, Dave Peacock, told FELIX that he expected a profit of £40,000, which would have been halved by the new rent.

The new rent was part of the College's policy to increase rents around the campus, including that of National Westminster Bank. The policy was decided by the College's Management and Planning Committee

## New ICU staff

IC Union appointed ex-ULU Vice President, Louise Van der Straeten as Assistant Finance Officer in August. The new permanent staff post is to be paid for by the Union's outlets and its central account.

Union President, Neil McCluskey, now hopes that Finance Officer, Reggie Blennerhassett will be able to devote more of his time to the management accounting he was employed to do originally.

## SAC in hot water

A mix-up between the Summer Accommodation Centre and the College's Estates section left 56 rooms flooded in Southside in September.

The hot water supply to the halls had been disconnected overnight and during the day to 'repair a burst main,' according to Managing Surveyor of Residences, Peter Hallworth.

Mr Hallworth told FELIX that everyone in the halls had received a leaflet warning them of the imminent disconnection. Several residents left their hot water

taps running however.

Speaking on the incident, Conference organiser, Pauline Clark, said, 'No, I still haven't been informed officially that the water was to be switched off.' She added that the staff at the Summer Accommodation Centre's reception desk had not been informed either. She described the leafleting of the halls as 'minimal,' and added that the residents had 'thought it was a rather a hoot!'

## Mary's refit

St Mary's Student Union had its bar and main hall refitted during the Summer. The cost of the refit was met by the Medical School and St Mary's Student Union.

The main hall, which had not been refurbished since the 1960's is used as a refectory and houses events during the evenings.



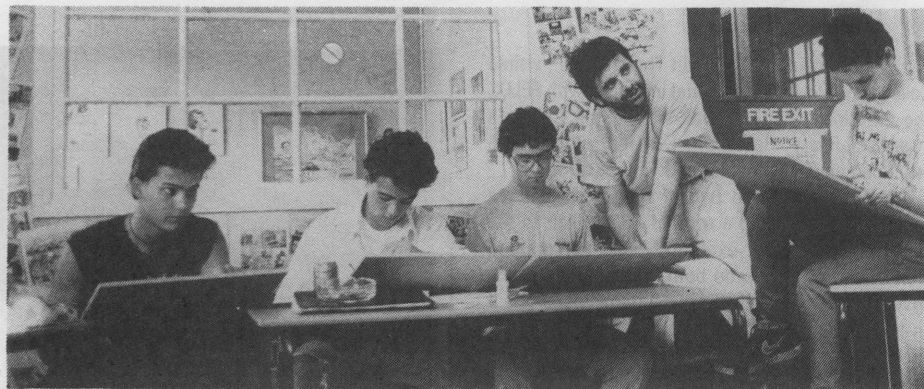
'My drawing isn't bad, and I like the sound of this comic business. Where can I learn more?' The answer is the London Cartoon Centre.

# Capital cartoon

Unless you've been out of the country for the last year or so, you will no doubt have noticed the amount of media attention that comics have been attracting. With the Batman film and the rising prominence of more mature, 'adult' comics such as *Deadline* and *Crisis*, the public eye has been forced upon this unique artform as never before. Several major book publishers are now entering the fray with extensive plans for comic projects.

"Hold on", you may say. "My drawing isn't bad, and I like the sound of this comic business. Where can I learn more?" Well, surprisingly, the only place in Europe that offers specific training in comic strip art is the North Kensington based London Cartoon Centre.

The Cartoon Centre grew out of a workshop started in 1984 by David Moran, who was convinced that there must be talented young people in his area who could draw original cartoons for a newsletter produced (under his guidance) by a local youth club. After a few unsatisfactory tutors, David Lloyd, artist of the



acclaimed series 'V for Vendetta', was asked to find someone suitable. He decided to have a go himself, and from there the Cartoon Workshop gradually expanded to become the Cartoon Centre, gathering enough support from the Portobello Trust, the European Social Fund and D.C. Comics to be able to

hire a full-time co-ordinator, Eve Stickler.

Today, with an impressive roster of experienced comic artists and illustrators for tutors, the Centre offers a range of evening classes covering all aspects of comics creation: strip illustration, script writing, humour scripts, anatomy and life drawing, with hopes to start colouring and animation courses in the near future.

A new development instigated by Ms Stickler is a daytime course running for two and a half days a week over ten weeks, comprised of the basic elements of the evening classes plus advice on setting up in business as a cartoonist.

Every term 'Masterclasses' are arranged featuring top name professionals such as Alan Moore, Dave Gibbons and Paul Neary talking about their techniques and looking at students' work.

In June the Cartoon Centre moved into new, purpose built premises in the Portobello Trust Business Centre, which provide good working space and equipment essential to budding Steve Bells, such as a light box, a guillotine and a photocopier—the last being used to produce the students' showcase magazine, *Silicon Fish*.

If the ultimate aim of the Cartoon Centre is to teach their students the skills necessary to make a living in comics and related fields, there can be no doubt of its success. Many of the graduates have gone on to professional work: Martin Griffiths and Darren Goodacre work for *2000AD*, Dougie Brithwaite has been published in *A-1* and is drawing *The American* for Dark Horse Comics, Nick Abadzis draws *Hugo Tate* for *Deadline*, and Denise Dean is working for Universal Studios on *American Tail II*, to name a few.

An interesting project which the Cartoon Centre is involved in is a collaboration with Amnesty International. The plan is for representatives of Amnesty and some of the Centre tutors to talk to various GCSE Art classes about human rights violations and drawing comics respectively. Then, as part of their GCSE exam, the pupils will have to produce a comic strip about a particular human rights case. Hopefully the results of this will demonstrate the effectiveness of comics as an educational tool and at the same time heighten awareness of Amnesty's work.

To attend the London Cartoon Centre you must be under 26. The evening classes cost £1.50 each (soon to rise to £2.00). Send photocopies of your artwork and/or scripts to Eve Stickler at the London Cartoon Centre, 249-251 Kensal Road, London W10 5DB, or phone her on 01-969 4562 and arrange an appointment. Let the longer haired of you be warned: Ms Stickler has a penchant for tugging pony-tails!

**Richard Crouch.**





# British Association

The annual meeting of the British Association for the Advancement of Science (BAAS), or BA89 in advertisers hype-speak, was held in Sheffield in mid September. Every year, Imperial College arranges for six paid-for trips to this somewhat expensive event, one of which happened to fall my way.

On this and the next three pages you will find my somewhat potted account of the week-long conference. Potted is probably too weak a word, a lot happened and I succeeded in missing the vast majority of it. What you find here is a collection of the items which interested me, which I could understand and which I got round to writing up. The result is a someone emaciated collection.

Sheffield has a topology all of its own. It is apparently built at the junction of half a dozen hills and seems to consist of a number of completely separate townlets with no apparent joins in between. The town boasts a University and a Polytechnic spread over about three miles and several sites and, no doubt to stop an interacademic war, the organisers spread the events fairly evenly between the two.

Individual sections, such as Physics, Chemistry, Medicine et al, each had their own home on one of the campuses. This was fine if you fancied spending a whole week immersed up to your intellectual eyeballs in your own subject. However, for those of us with wider interests things were more difficult.

Travelling between two interesting talks at two widely spaced sites was a challenge. There was an alleged half hourly bus service shuttling between Poly, University and various residences which was adequate unless you found yourself on the wrong side of town an hour before a lecture. 'Don't ask me, I'm from Barnsley' explained one harassed driver.

The lectures were generally good and, unlike here, the audiences, mostly of school teachers, school children, random academics and keen OAPs, was interested and attentive. Subjects varied from the accessible through the obscure to incomprehensible Psychology seminars and much attention was paid to Science and the Media.

These media meetings ran like a scientific journalism who's who as Heather Couper agreed with what Nigel Henbest had said about Tom Wilkie's opinion of Colin Blakemore. All involved agreed that scientists should be nicer to journalists and more journalists should try to understand science.

Needless to say, the press reports on the BA, a self-proclaimed scientific media event, were hidden on inside pages of the quality papers well behind the report on the SLD congress.

Jason Lander

JL

# SCIENCE 89

## ESA: towards 2000

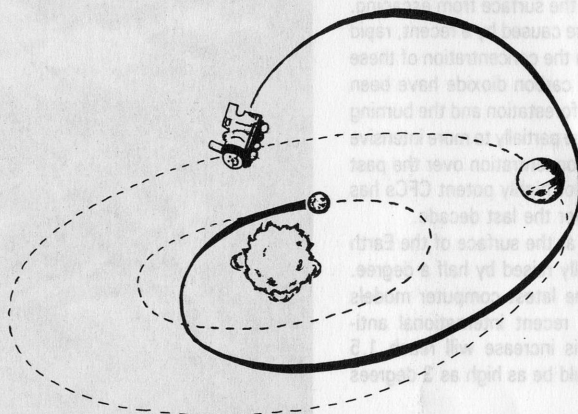
The Solar System has been explored,' says Professor Roger Bonnet, Director of Science for the European Space Agency ESA, 'Now it needs to be studied.'

A detailed study of the Solar System is the aim of ESA's long-term 'Horizon 2000' programme which Professor Bonnet outlined at a meeting of the Physics section of the British Association. The programme includes plans for missions to Saturn, to study the Sun and even an ambitious project to land on the nucleus of a comet.

The Solar Terrestrial Science Project (STSP) is one of Horizon 2000's major 'cornerstone' projects. It will investigate how conditions on the Sun influence the environment of Earth and consists of two linked

will be carried on the American Cassini mission to Saturn. While Cassini concentrates on the planet and its famous system of rings, Huygens will attempt to gently land on the moon Titan. This unique body is believed to have a chemical composition and atmosphere like that of the early Earth. Huygens will be able to photograph its surface and examine its structure possibly giving us a glimpse of the early life of our own planet. Cassini and Huygens are scheduled to set out in 1996 or 1997.

One of the most successful space missions of recent years was the Giotto probe to Comet Halley. The spacecraft, though badly battered, survived the encounter and plans are now being made to send it



schemes: SOHO, observing the Sun, and CLUSTER, studying the Earth.

SOHO will use the recently-developed technique of 'helioseismology'. It consists of a single satellite capable of detecting shock waves at the surface of the Sun and in its atmosphere. The behaviour of these disturbances can reveal much about conditions inside and uncover hidden activity.

The CLUSTER scheme is not a single satellite but, literally, a small cluster orbiting close together within the Earth's magnetic field. The satellites are designed to detect small changes in the strength and direction of the field and by comparing the data from all the individual craft it will be possible to find out how such disturbances travel through space. The two schemes are scheduled for a launch in 1995.

Studying the Sun is also the aim of the Ulysses project. This is a joint US-European venture to examine the Sun's North and South poles. Earth, like all the major planets bar Pluto, orbits around the solar equator. We have not, as yet, seen the Sun and the Solar System from 'above' or 'below' the plane of the planets. By using the gravitational field of the massive planet Jupiter, the Ulysses project aims to throw a satellite into an orbit passing directly over the Solar poles.

The Ulysses satellite will measure the strength of the 'solar-wind', a stream of high speed material thrown out from the sun into space, and the density of interstellar gas. It is due to be launched from the Space Shuttle in October 1990 to reach its final orbit by 1995.

In addition to the Solar missions, ESA plans to visit the Planet Saturn. Huygens, a European space probe,

on to another target, the more obscure Comet Grigg-Skjellerup.

All being well, Giotto should be reactivated early next year and should reach its final destination by 1992.

A more ambitious cometary mission is Rosetta. This is another joint US-European effort, this time to collect and return to Earth samples from a comet's nucleus. To do this a probe must be landed on and anchored to the nucleus itself. Any material collected must be placed in a sealed container for transport back to Earth. Comets are believed to be remnants from the early years of the Solar System and the mission may provide much information about its creation. Rosetta is one of Horizon 2000's final cornerstones and, as yet, is not fully approved.

Professor Bonnet and his ESA colleagues believe that no single organisation can afford to do pure space science on its own. The future lies in joint projects: there are plans for European contributions to future superpower visits to Mars and, perhaps more exotically, a joint European-American-Soviet mission to the Sun known as Vulcan. The Vulcan probe will be designed to 'graze' the surface of the Sun at a distance of just four solar radii. There it will be able to make the first direct measurements of the composition of the solar atmosphere. If it goes ahead, Vulcan could be launched by 2004.

All these large projects need massive funding from all concerned and although ESA may have plenty of ideas, multinational collaboration is always vulnerable to the whim of politicians and the political 'realities' of underfunding, Glasnost, Perestroika and US budget deficits.



*With the discovery of further contributory factors, the erosion of the world's atmosphere is becoming more and more imminent. The latest computer models predict that the surface temperature of the earth could rise by three degrees by 2060. The world is warming, scientists are working and politicians are panicking as they discover.....*

# The greenhouse effect

Global warming, caused by the greenhouse effect, is one of the few scientific issues which interests politicians. It is also one of the most urgent and, unsurprisingly, the BA discussed it at length.

We need the greenhouse effect to survive: without it the planet would be over 30 degrees cooler. Most solar radiation can pass through the atmosphere but long-wave, infra-red radiation cannot. This is because of the presence of the so-called 'greenhouse gases': water, carbon dioxide, methane and chloro-fluorocarbons (CFCs) which act as a 'blanket' stopping the long-wave radiation from the surface from escaping.

Our current problems are caused by a recent, rapid and man-made increase in the concentration of these gases. Large amounts of carbon dioxide have been released through mass deforestation and the burning of fossil fuels; methane, due partially to more intensive farming, has doubled in concentration over the past century and the quantity of highly potent CFCs has increased dramatically over the last decade.

The mean temperature at the surface of the Earth has already been artificially raised by half a degree. The BA was told that the latest computer models predict that, even after recent international anti-pollution agreements, this increase will reach 1.5 degrees by 2030 and could be as high as 3 degrees by 2060.

The models differ in detail, but all agree that the average temperature rise at the poles will be greater than at the equator. They also agree that there will be greater evaporation from the oceans. What is less certain is what this will do to rainfall. It is believed that the higher latitudes will become wetter in winter and drier in summer. Dry sub-tropical areas will become still drier.

As the temperature increases, the polar ice caps will start to melt and, more significantly, the warmer oceans will expand. This will cause the sea-level to rise. The best current estimates are of a sea-level 20cm higher than today's by 2030 and 35cm higher by 2060.

All these figures assume that the models have included all possible effects. Not all researchers agree that they have. One of the missing factors, according to Dr John Woods of the Natural Environment Research Council, is the recently discovered 'plankton multiplier' which could lead to still more rapid warming in the future.

Plankton, microscopic plants, in the seas and oceans absorb vast quantities of carbon dioxide as they grow. Present models assume that half the carbon dioxide released into the atmosphere will be absorbed in this way. Dr Woods believes that the plankton multiplier may mean that this is a dangerous overestimate.

For most of the year, ocean turbulence washes the plankton up and down through hundreds of feet. Masses of the tiny plants spend most of their time in out of the reach of sunlight, unable to grow. It is only in spring, when the oceans are at their most calm, that the plankton hover close enough to the surface to



absorb sufficient carbon dioxide.

It is believed that as the oceans warm, they will become more turbulent. The period of comparative calm will become shorter and less gas will be absorbed. A greater fraction of the carbon dioxide released will remain in the atmosphere contributing to global warming.

There is evidence that the plankton multiplier effect is responsible for the 7 degree temperature which ended the last ice age.

Dr Woods hopes that new computer models of the world's ocean system and the work from the research ship Discovery will lead to a better understanding of this potentially disastrous phenomenon.

Global warming may cut the amount of energy available from wind power, according to Dr Trevor Davis of the University of East Anglia's School of Environmental Sciences. According to recent research, the warming planet has left Britain less windy than half a century ago.

This is because the poles have warmed faster than the equator. The difference in atmospheric pressure across the planet is now smaller and, as this difference is related to the amount of energy carried by the wind, the wind speed has fallen.

The British Wind Energy Association has estimated that wind energy could eventually provide up to 20% of our energy needs. However the slowing winds will affect the power output of the proposed wind

turbines. Dr Davis has calculated that in some places, the turbines will be producing 30% less power at the end of their lives than at the beginning. By using more fossil fuels now, mankind could easily be depriving itself at least partially of a future source of power.

Another speaker, Dr David Shannon, the chief scientist at the Ministry of Agriculture, examined the effect of a changed climate on farming. Britain, he told the association, might become a food exporter, growing food for nations more badly affected than itself.

He predicted higher production with changes in the crops being grown to take advantage of warmer, wetter winters. However, if the planet continues to warm, conditions could rapidly become much worse.

Cattle, according to Professor Phil Grime of the Natural Environment Research Council, will no longer need to be housed in the winter but would find it harder to find food in a hotter, drier summer. He predicted that irrigation schemes would become as much a part of UK farming as they are now in more arid regions. Weeds and pests would flourish under the changed conditions.

Our knowledge of our climate is still incomplete. There are few who would disagree that more research is needed. However scientists and even politicians now understand that our planet and its environment have limits and we are rapidly approaching them.



*In April 1953, Francis Crick and James Watson formally announced their discovery of the famous double-helix structure for DNA. Since then, the science of Genetics has advanced in leaps and bounds. It is now on the edge of 'big science'.*

# The Handbook of Man

Evolution may be the most successful of all scientific theories but recent research casts doubt on one of the fundamental principles upon which the modern theory is based.

The work, by Dr. Jeffrey Pollard of the Albert Einstein College of Medicine, suggests that it may be possible to overcome 'Weismann's Barrier,'

August Weismann, working in the late 19th century, suggested that what he called the 'germplasm', material carrying genetic information can only be passed directly from one generation to the next. In effect there is a biological barrier against 'foreign' material. Any changes between generations must therefore be the result of either the shuffling of existing material or random errors in its replication.

Weismann's theories eventually lead to the downfall of the 'Lamarckian' theory of evolution. This theory, named after a 19th century French biologist, had many followers including Charles Darwin himself, and stated that it may be possible by some unknown means for parents to modify the genetic material passed on to their offspring to give them some biological advantage.

Since the days of Weismann and Lamarck the science of genetics has made a number of major leaps forward, not least the discovery of the structure of

DNA. Most of this research seemed to show that genetic material is effectively stable, protected by Weismann's barrier, and accurately copied between generations. This gave rise to the modern 'Neo-Darwinist' theory of evolution in which only the principle of 'survival of the fittest' applies.

However, recent work, including that of Dr. Pollard, suggests that genetics may be more flexible than previously thought. Molecules of DNA have been seen to grow and shrink and move around within the chromosomes which hold them. They may even pick up material from external sources such as viruses.

To Dr. Pollard this is a strategy for survival. He believes that it is possible for life-forms to speed up evolution by copying their DNA inaccurately, something which has already been observed in certain bacteria. It may also be possible for higher animals to alter the genes of sperm and egg cells in response to changes in the environment.

Dr. Pollard believes that controversial experiments using 'harmless' viruses to transfer new genetic material into cells could back up his work. He does not, however, advocate a return to pure Lamarckism. In his version of evolution survival of the fittest is still the most powerful influence—all he has done is put a few holes in Weismann's barrier.

## Breaking evolution's barriers

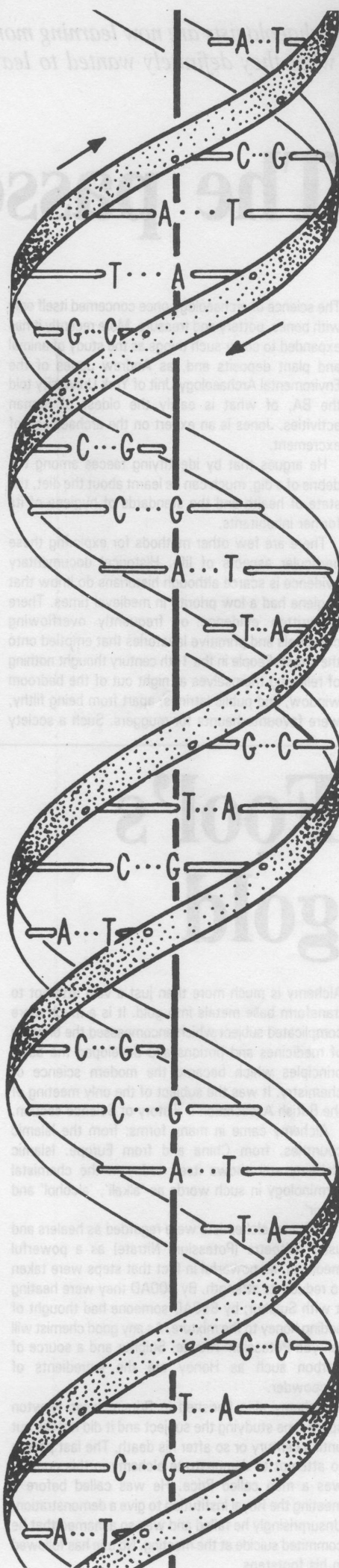
The human genome is what carries the information which makes us what we're. It is in effect the 'Handbook of Man' and, according to Sir Walter Bodmer the director of research at the Imperial Cancer Research Fund, within 15 years it may have been decoded.

DNA, the basic stuff of life, contains within it's famous double helix a long sequence consisting of just four basic constituents or bases. It takes 3,000 million bases to define a human being, divided into 46 chromosomes. Inherited diseases are faults in this sequence: sickle cell anaemia, the blocking of arteries by misshapen blood cells, is known to be caused by one error in a 146-base sequence. Other conditions such as Muscular Dystrophy and Arthritis have been traced to defective genes. Cancer is known to be a 'genetic flaw'.

Yet, despite these successes, geneticists have decoded only a tiny part of the total sequence. Sir Walter and his colleagues in the Human Genome Organisation (HUGO) believe that the way forward will be to unscramble the rest.

This gigantic international project could cost as much as £2 billion spread over all the countries involved. Not much, said Sir Walter, compared with 'the odd trident missile or the take-over of just one American hotel chain'.

The problem has been likened to taking fragments of text from a dictionary and, by finding out where they overlap, piecing the complete dictionary back together. Some experts believe that this will need computers 10,000 times faster than those in use today.



*Archaeologists are now learning more about how our ancestors lived from what they definitely wanted to leave behind...*

# The passed and the present

The science of archaeology once concerned itself only with bones, pottery and treasure. More recently it has expanded to cover such things as the study of animal and plant deposits and, as Andrew Jones of the Environmental Archaeology Unit of York University told the BA, of what is easily the oldest of human activities. Jones is an expert on the archaeology of excrement.

He argues that by identifying faeces among the debris of a dig, much can be learnt about the diet, the state of health and the standards of hygiene of its former inhabitants.

There are few other methods for exploring these particular aspects of life. Historical documentary evidence is scarce although historians do know that hygiene had a low priority in medieval times. There is written evidence of frequently overflowing cesspools and primitive lavatories that emptied onto the street. People in the 14th century thought nothing of relieving themselves at night out of the bedroom window, and public latrines, apart from being filthy, were favourite haunts for muggers. Such a society

offers rich pickings for someone like Andrew Jones.

The first problem that any excrement archaeologist faces when he visits a site is that of separating centuries-old faeces from other ancient organic material such as waste food and animal dung. 'Fortunately,' the BA was told, 'the ancient excrement detective has clear clues to follow.'

The eggs of the parasitic worms which live inside animal intestines are fairly resilient and can be easily and accurately identified after being buried for thousands of years. The problem is not identifying the eggs but identifying the unfortunate host. Whipworm eggs are a useful clue: they are large and easily recognisable but the whipworm is known to infect pigs, dogs, mice, rats and sheep as well as human beings.

For help, the researchers turned to the bodies from the bogs: ancient human remains preserved intact in the acidic conditions of a peat marsh. These bodies have been found to be parasitised by whipworms of particular species, the eggs of which are significantly smaller than those found in other animals. This gave

researchers an ideal method with which to separate human and animal excrement.

The technique helped identify the so-called 'Lloyds Bank turd' excavated in York as being of human origin: it contained around 133 000 whipworm eggs per gram.

There are other clues. Latrine pits contain large quantities of recognisably intact cereal bran. Fish bones have also been found. The bones are of particular interest to Jones who carried out a series of experiments to see if they could be traced back to humans.

An unnamed experimenter ate a whole kipper and faeces were collected over the following week. These were found to contain a small number of fish bones crushed and partially dissolved in exactly the same way as those found in the latrines. This is significant: fish bones can survive in conditions that can destroy parasite eggs.

Archaeologists are now learning more about how our ancestors lived from what they definitely wanted to leave behind.

## Fool's gold

Alchemy is much more than just a vain attempt to transform base metals into gold. It is a much more complicated subject which encompassed the brewing of medicines and potions and developed the basic principles which became the modern science of chemistry. It was the subject of the only meeting of the British Association's History of Science section.

Alchemy came in many forms: from the Islamic countries, from China and from Europe. Islamic alchemy still shows itself today in the chemist terminology in such words as 'alkali', 'alcohol' and 'elixir'.

In China, alchemists were regarded as healers and used Saltpetre (Potassium Nitrate) as a powerful medicine, so powerful in fact that steps were taken to reduce its strength. By 300AD they were heating it with Sulphur; by 850AD someone had thought of adding honey to the mixture. As any good chemist will tell you Potassium Nitrate, Sulphur and a source of Carbon such as Honey are the ingredients of gunpowder.

Alchemy also flourished in Britain, Issac Newton spent time studying the subject and it did not die out until a century or so after his death. The last person to attempt to demonstrate alchemy in this country was a man called Price. He was called before a meeting the Royal Institution to give a demonstration. Unsurprisingly he failed and was so ashamed that he committed suicide at the meeting. No one has followed in his footsteps.

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## New brains for old

Professor David Marsden is one of the few researchers whose work has attracted the attention of the World's media. He was one of the pioneers in the use of foetal cells to repair the damaged brains of the victims of Parkinson's disease. The cells produce the chemical dopamine which sufferers' brains lack. Recently, he has tried to extend the technique to the repair of severed spinal nerves.

So far, the only spinal nerve experiments have been on animals and the work on Parkinsonism, although it is now using human guinea pigs, has yet to produce convincing results. The condition of the first patients has only slightly improved.

Professor Marsden is working on refining the technique which is so sensitive that something as apparently insignificant as the thickness of the needle used can affect whether a graft takes or not. He blames the press for raising sufferers' hopes and driving researchers to work faster than they should have done.

At the moment, it can take up to six aborted foetuses to provide enough material to treat one patient. However, it may be possible in the future, to replace these with genetically altered skin cells or clones of brain cells taken from a single foetus.

## Sadder but wiser?

Depressives, people for whom the World is unremittingly awful and only likely to get worse, would probably not take comfort from the latest psychological research; they could be right.

Received wisdom, according to Dr Shirley Fisher of Strathclyde University, says that there is a fault in the way a depressive perceives evidence. He or she is more likely to overgeneralise, to be pessimistic and to accept blame. This is believed to lead to a loss of motivation and a drop in self esteem.

However recent laboratory evidence seems to indicate that the depressed are good judges of evidence 'especially when judging the relationship between what they do and what happens.'. It is the

non-depressed who distort the evidence: they tend to be over-optimistic.

Dr Fisher, perhaps over-optimistically, does not conclude that life is genuinely a bad deal which most people seem to be able to ignore. Instead depression may be a biological trick to avoid trouble.

In any society, 'losers' try not to confront 'winners'. By publicly understating their abilities, depressive 'losers' are able to control sensitive situations without causing trouble with those of higher 'rank'.

The technique can get out of control: a person who says 'I'm no good' too often may eventually end up unnecessarily maintaining a reputation for being incompetent.



The Ents crew tell you about the party to end the week with.

# The Freshers' Ball



I hope you all enjoyed Monday and Wednesday night and are raring to go for tonight—Party Night! If you've missed the publicity for tonight you need glasses but just in case you have, I'll run through it quickly. The bands are *Big Town Playboys*, *Jivin' Instructors* and *Dave, Puppy and the Happy Dogs*. We also have a casino, late bar, cocktails, late discos and food. All in all an excellent night's entertainment.

Other events planned in the term include the *Muscle*

*Shoal* on October 20th in the Lounge and other assorted comedy, bands and discos every Friday night (except October 13th). More details nearer the time. We still have some Ents cards if anyone hasn't got one and wants one, priced £7. Anyone who failed to pick up their Freshers' Week ticket on Monday can come to the Union Office and we will refund the money.

## Ents Disco

Wednesday night is one of the most regular of all the Ents events. We run a FREE disco in the Ents Lounge every Wednesday. Also some Wednesdays we will be running joint parties with other colleges like St Mary's and the AIFS.

This year's disco will feature an improved light show and the possibility of theme nights and, of course, all the latest and greatest sounds in chart house indi etc.

The disco is also available for hire for halls, societies and private parties at the cheapest prices around. The Ents disco can be used in two forms: the fixed Lounge disco or a mobile disco. If you are thinking of having a party contact me via the Ents pigeonhole in the Union Office.

**Gwyn Jones, Ents Disco Officer**



Thanks to everyone who helped out on Monday and Wednesday and if you would like to become one of the infamous Ents crew we are having a meeting on Tuesday at 1pm in the Lounge.

## Nirvana—Bleach

*Bleach* is the debut album from *Nirvana*. They are exponents of 'heavy grunge' rock, a bit like *Hüsker Du* or perhaps *Motorhead* with a little sophistication. (A pity really as *Motorhead*'s charm is their lack of sophistication.) It is raw, unpretentious stuff, performed in a workmanlike fashion by the four piece *Nirvana* and whilst it does not have anything special to distinguish it from the rest of this genre it satisfies

the market. There are a few gutsy screams from vocalist Kurt Cobain, particularly on *Scoff* and the curiously titled *Floyd the Besler*, the occasional guitar riff and a rhythm section with the energy of a blacksmith on speed. As 'melody' and 'tune' are not factors here, modern popular music is unlikely to be transformed by *Nirvana* but they could teach *Guns 'n' Roses* a thing or two about heavy rock.

## Phillip Boa

A German, over whom the serious music papers are apparently having orgasms, *Container Love*, out on Polydor is a totally unmemorable dirge in which Phil grunts like a tramp and his partner Pia tries to sound like a bored supermarket checkout girl. It lacks the blandness of the S-A-W drum machine but at least Sinitta tries not to sound like the shop assistant.

He's probably so intelligent that he gains his inspiration from Stravinski and Schoenberg in which case he'll never make the Top 40. For your information the B-side is subtly called *Annie Rides the Lover Bember* and its acoustic version is as bland as the A-side.

## Son of the Sun—One

**On Crystals**

Meanwhile *One's* number of the beat, majestic thumping, pumping pop to dance, jump, skip and hop' is not half as bad as the press release would have us believe. *One* is not quite 'a flower in a forest of weeds' but is a three piece who can play and sing a decent tune and will probably fail to trouble the DJs at Radio 1 at all. However this is what pop should be. Danceable with half-way intelligent and intelligible lyrics, it features no female orgasms, sexual innuendo and a no hope dance remix on the flip-side. Thoroughly recommended all round even though they are reminiscent of Lloyd Cole at times.

## Jethro Tull

**Hammersmith Odeon**

21 years on from their conception, Jethro Tull are still going strong, oblivious to musical fashion and promoting a new LP *Rock Island*.

To the fore is Ian Anderson, still manically snorting and grunting into his flute whilst standing on one leg or singing of farming problems and lecherous tramps by the name of Aqualung. His lechery is even less repressed nowadays judging by the slick show that accompanied *Kissing Willie* or the scantily clad woman who showed us her 'Wisp of cotton panties' during *Night in Budapest*.

Supported by Dave Pegg and Martin Alcock (now the driving force behind *Fairport Convention*), Doane Perry and Martin Borne, *Tull* seem to have found a stable line-up. Borne, beardless for the first time ever, now has pretensions as an axe-hero and indulged in enough posturing to make up for the others' lack of it, but it was the enjoyment with which they all played around in between numbers which made the show intimate. Alcock's 'coal driven' keyboards running out of steam and Perry's 'violin miming' made the concert an occasion to be remembered rather than over-rehearsed video effects that many concerts have now become.

Material from *Rock Island*, a patchy collection of familiar ideas was eclipsed by older songs with an emphasis still on the 'album of '73'. *Aqualung Humn 43* and *Cheap Day Return* now being *Tull* standards and *Locomotive Bxxxx* acting as an encore, as usual. The Renaissance of the old rock stars has covered the fact that *Tull* never stopped doing it and will probably continue long after the *Stones* break up again.



*What really goes on at political conferences? What do all those delegates do when not grabbing their five minutes of fame before the TV cameras. Andy Waller walked down the middle of the road to the Social & Liberal Democratic conference to find out.*

# Salad days

What better way is there to wind up your summer holiday than going to a political conference? I suppose there are at least several million better ways, but this is a report from someone who was silly enough to jump onto the nearest *Rapide* coach and head down to Brighton at the beginning of September.

Security is one of the major headaches at any major conference these days and it certainly caused me some problems. Arriving to register heavily laden with suitcase and sleeping bag I was promptly told 'You can't go in there with those'. However I couldn't take them direct to my digs as I needed to collect the key from the Youth Stall inside the conference centre. Deadlock: and my shoulders didn't feel that much alive—if only I hadn't listened to my mother suggesting that extra jumper. A kindly porter at the Grand Hotel (conveniently next door) said that I could leave them in the lobby until I got my key.

That problem sorted out, I ventured around the sights and sounds of the various stalls in the conference centre. I thought that British Nuclear Fuels were wasting their time, but I did get a rather nice telescopic keyring/pen off them. Wandering around, there were yet more freebies to be had: a free sewing kit, pen and keyring from the Royal Bank of Scotland—at least I now had my key to put on the key rings.

There are several bars in the Brighton Centre and in trying to find one of them open I stumbled across the conference hall where (horror of horrors) someone I knew was making a rather silly speech. So I left: it was only the English Federal Conference, a sort of warm-up session to the real thing. By then it was time to check-in and chat with one of the major political commentators of our day—a taxi driver. He admitted that he had once voted for us in the past but enquired as to why anyone bothered to have a conference when there wasn't going to be a General Election for such a long time, and whether we had already sorted out how the votes were going to go during the following week. I said that we weren't that sort of a party. Luckily we then reached Brighton Poly Halls.

What on earth is there to do at a party conference? This being my first proper one, it took me a few days to work out the rules.

1. Wander about looking as though you know what you are doing, and saying a brief hello to whoever you can remember from the last conference, by-election, council meeting or breakfast. When you have been through everyone once then start again trying to get on television doing it.



2. Put in 30 million speaker's cards in the hope that you will get called and then hurriedly learn the speech you wrote on the bus that morning.

3. Go to as many free lunches or buffets as you can.

As for rule three, whilst it is party policy to deplore any 'political' expenditure on pre-privatisation advertising by the major utilities like water and electricity, this does not stop you from eating any free food or beer on offer.

Paddy Ashdown's first speech to the conference began in Mandarin (from his days in the Special Boat Service) which has to be a first. The full conference was opened on the Monday morning by the Mayor of Brighton. There followed some interesting debates and some not so interesting debates. Whilst it is flattering for a political party to have extensive live coverage on television, I wonder who actually watches it, apart from the few thousand party faithful or Aunt Flo who has been tipped off that her darling nephew/niece is about to make a major controversial speech in a pull-over she knitted them for Christmas.

On Monday afternoon I dutifully bought my specially signed copy of David Steel's autobiography. It was also possible to get other books signed by their authors. I suppose it was sheer coincidence that all these books by the party hierarchy came out at about the time of the conference. After all, ours is not a cynical party, is it?

Tuesday saw the big guns being brought out for (yes, the cliché gave it away) the defence debate.

Trident was accepted ready for the next General Election, along with the rest of a paper on East-West relations. The policy process is currently 'deliberative' i.e. preliminary papers are prepared, discussed, amended and then passed, rather than being made on the hoof. There was an attempt to alter this and the debate produced the memorable quote 'Take a look at the person sitting next to you, does she look like a Trot?'. Well personally I hadn't thought of Ian Wigglesworth's former secretary in quite that context.

Every day each delegate was bombarded by hundreds of leaflets, papers and documents and so with environmental concerns being at the heart of the party our Councillors from Adur (just down the road) provided eco-bins to recycle all this waste paper.

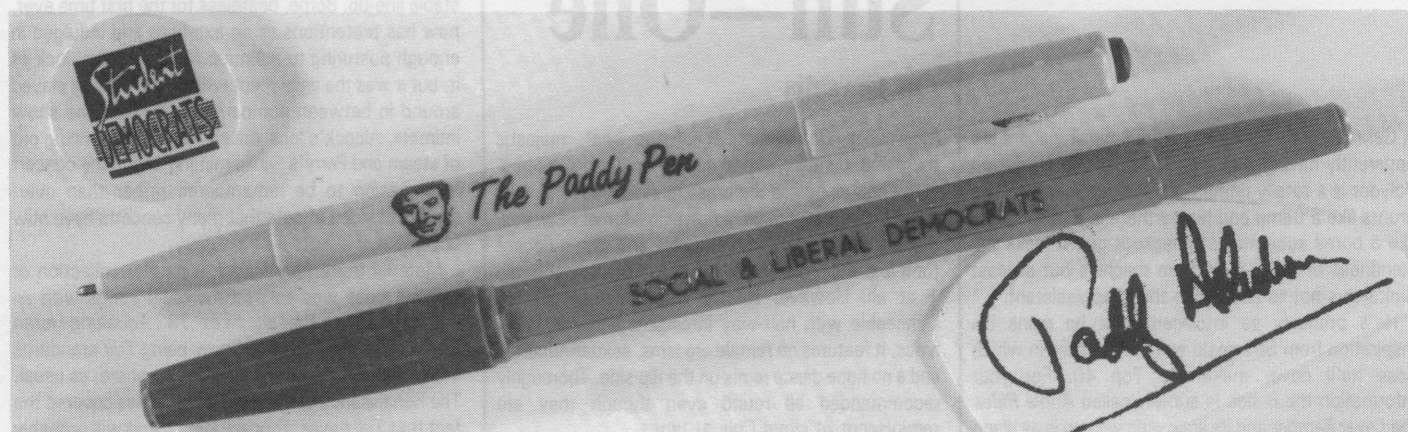
The press seemed to be covering a completely different conference and one enlightening story came from the Youth Stall where someone was approached by a *Today* reporter who wanted a comment about Paddy Ashdown allegedly taking up a very large suite in the Grand at the Party's expense. It transpired that he had already written the article about the Youth Wing's indignation before he arrived.

We were also all alarmed to hear that Sir Russel Johnson (MP for Inverness, Nairn and Lochaber) was about to resign as Whip. He did say that he hadn't even spoken to the press, but the bright young thing of the old SDP, Charles Kennedy, said that it was his own fault to be misquoted by saying nothing at all.

Thursday night saw the traditional sing song and perhaps the best contribution to the name debate coming from a rendition of 'Socialliberaldemocraticxpiallydocious'. Other amusing ditties included 'O Pad, our help in ages past/Our hope for months to come/Take thy computer in both hands/And stick it...' to the tune 'O Lord, our help in ages past', which goes to show that even a 'non-conformist' party knows tunes from 'Ancient and Modern'.

Finally came the speech they had all been waiting for. The adoring members, and even those with woolly pullovers (of which there could only have been a handful), sat and listened to Paddy's Leadership Speech. The standing ovation would have lasted longer, only I think Baroness Sear wanted to sit down after five minutes.

Homeward bound with my SLD rock, Paddy pen and other memorabilia, it did cross my mind that several of my friends would consider me slightly mad for having been to a party conference, but nevertheless it's Blackpool next year for me.





# Nightline eviction

Dear Dave,

I am writing to you following your article on the eviction of Nightline by College at the end of the year.

Firstly the comments attributed to Neil McCluskey which implied that as he'd never had cause to use Nightline the money spent on it could be better used elsewhere were, I hope, taken out of context and surely can't reflect official Union policy.

Nightline provides a valuable listening and information service throughout the night for anyone to use. It is run for students in London by students from London and as such is uniquely suited to student needs. I found Neil's comments ill thought out and offensive to an organisation whose volunteers, by nature of their anonymity, can get no outside recognition for the effort they put in.

By repossessing the Nightline Office College gains accommodation for up to three students which will require both work and money to be brought up to a suitable standard for year round occupation.

Nightline will lose secure premises in an area which is relatively safe for its volunteers to travel to and from and is ideally located in a central area for volunteers from all the different colleges to get to. It would lose its internal phone line which means that IC students would no longer be able to use the service on the internal system from any hall or College phone.

The argument that it's someone else's turn to house Nightline is a poor one. Couldn't another college provide accommodation for three IC students rather

than destroying what is a near ideal set up at Imperial and jeopardising the future of one of the largest student Nightlines in the country.

People, particularly Union Presidents, must realise that as anonymity is a pre-requisite of Nightline it makes defending it very hard. Rather than just letting this eviction take place I would ask all those involved to try and come up with viable alternatives and protect an organisation that cannot publicly protect itself.

Name and address withheld.

## Molto fascisti

Dear Dave,

Isn't it funny how nothing ever seems to change?

The subject of this venting of spleen on my part is the wonderfully neutral and informative booklet foisted on the new intake by that well-known bastion of tolerance, the Imperial College Conservative Society, a group of individuals so devoted to market forces that they cannot even bring themselves to use the word 'Union' in their own title, despite the shameful fact that the Union funds them, and that they are all members of it.

What have they done? Well, what do you expect? They have once again launched themselves on a crusade to worm their insidious propaganda into the minds of the gentle and the innocent. A campaign of spiteful half-truth, poisonous generalisation and blind self-satisfaction, prompted by a typical 'I'm alright Jack' attitude, and directed at the usual targets such as Socialists, members of the NUS (not all of whom

attend or applaud wasteful conferences, no platform policies or the IRA) and the poor old homosexuals, appears to be the standard opening shot in what will almost certainly be an increasingly ignorant and uncaring year.

The old Federation of Conservative Students was rightly regarded as a gross political embarrassment by the current government. We can see very easily that only the name has changed: The willful blindness and vicious intolerance are just the same.

I have no doubt that the Conservative Society will:

- Write to Conservative Head Office, naming me as a subversive, and
- Write a reply to this with several pages of statistics proving the fairness of Student Loans and the Community Charge. For an encore, they will then eat the Queen's Tower and prove that the Moon is made of blue cheese.....

Yours,

Andy Bannister.

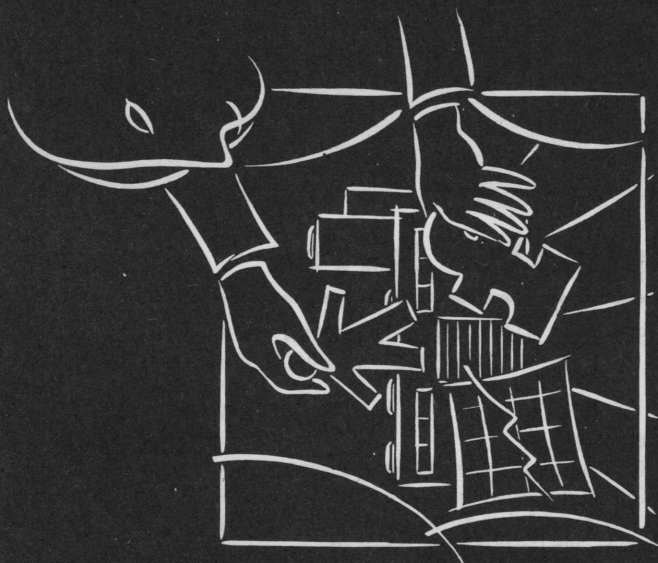
## TIDDLYWINKING

*—get out and about  
in London*

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MEET AT YOUR CCU OFFICE**

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For an application form ask at your Careers Service or write to Peter Tomlinson, Procter & Gamble Limited, Newcastle upon Tyne NE99 1EE.

Closing date for applications is November 3rd, 1989.



# What's On

AN UP-TO-THE-MINUTE GUIDE TO EVENTS IN AND AROUND IMPERIAL COLLEGE

## FRIDAY

- Rag Meeting.....12.35pm**  
Union Lounge.
- Friday Prayers.....1.00pm**  
Southside Gym. Organised by IC Islamic Society.
- IC Radio Disco.....8.30pm**  
Southside.
- Garden Party.....5.00-7.00pm**  
Gordon Square WC1. Including food and the performance of 'El Shaddai', a mime set to music. Sponsored by ULU & University Christian Outreach.
- LIVE BAND.....10.30pm**  
"Jivin' Instructors" in the Concert Hall followed by "Big Town Playboys" at 1.00am
- DISCO.....9.00pm onwards**  
In the Lounge
- LIVE BAND.....11.30pm**  
"Dave Puppy and the Happy Dogs" in the Lounge followed by a disco
- DISCO.....9.00pm onwards**  
In the SCR.
- CASINO.....9.00pm onwards**  
In the Union Dining Hall.

## SATURDAY

- Tiddlywinking.....10.00am**  
Meet CCU Offices for tiddlywinking down Oxford Street in aid of Rag.
- Barbeque.....5.00pm**  
Southside. After tiddlywinks.
- C&GU Pub Crawl.....6.30pm**  
Meet Southside.
- Week's Hall Party.....8.00pm**  
Week's Hall.

## SUNDAY

## MONDAY

- RockSoc Meeting.....12.30pm**  
Southside Upper Lounge. Interested in any form of Rock Music? Come along and have a beer.
- WellSoc Cheese & Wine.....7.30pm**  
No location given.

## BENEFITS & RIGHTS

12th & 13th October

11.30-3.00pm JCR

Thursday 12th October

Miranda Pascal, DSS Kensington  
Daril Matthews, Tenancy Advice &  
Housing Benefits

Yve Posner, ICU Welfare Adviser  
Schimps Carruthers, Chelsea CAB

Friday 13th October

Peter Barker, Housing Benefits  
Jennifer Hunt, Tenancy Advice

Cathy Presland, UKCOSA  
Yve Posner, ICU Welfare Adviser  
IMPERIAL COLLEGE UNION WELFARE

## TUESDAY

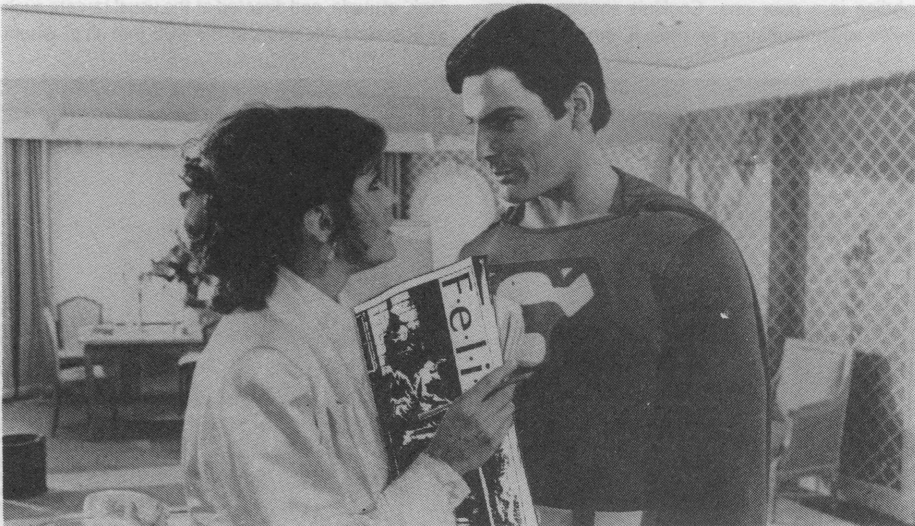
- ULU Intro Fair.....5.30pm**  
ULU version of Freshers' Fair. Malet Street.
- Scuba Diving.....6.30pm**  
Introductory Meeting for all those interested. Biology Seminar Room W2 (Beit Arch).
- Judo.....6.30pm**  
Union Gym.

## WEDNESDAY

- ULU Free Sports Day.....all day**  
All sports facilities in ULU will be free to ULU cardholders for one day only.
- Ten Pin Bowling.....2.20pm**  
Meet outside Chem Eng/Aero.

## THURSDAY

- Gliding Club.....5.30pm**  
Come and find out more about us in Aero 254.
- IC Choir Rehearsal.....5.45pm**  
Room 342 Mech Eng.
- Judo.....6.30pm**  
Union Gym.
- Scuba Diving.....7.00pm**  
Try an aqualung free in Imperial College swimming pool.
- IC Radio Disco.....8.30pm**  
Next to Southside Bar.
- ICCG Soup Run.....9.00pm**  
Meet Week's Hall Basement Kitchen. Help deliver food to London's down and outs.



## Small Ads

ADVERTISE IN THE FELIX SMALL ADS SECTION  
**FREE** IF YOU ARE A MEMBER OF IMPERIAL  
COLLEGE UNION

### ANNOUNCEMENTS

- **The British Red Cross Society**, Imperial College, First Aid Course: A standard First Aid Course under the Health and Safety at Work Act will be held on Monday 9th October 1989. If you are interested come to the Holland Club at 6pm. Hope to see you then. Roger Serpell, Group Leader.
- **Weeks Hall Reunion Party**. Saturday at 8pm. Weeks common room. All past and present Weeks Hall residents welcome.
- **All VWC'ers** please contact Wouter van Hulten in Department of Computing 2, so that we can have a mini-reunion.

## POSTGRADUATES please note

The Maths Advice Centre gives guidance to PGs on mathematical problems connected with their research projects. Please contact:

**Dr Geoff Stephenson,**  
**Room 6M24, Maths Dept.**  
**Tel: 5752**

For an informal discussion of your problem

## LOST & FOUND

### POLL TAX CERTIFICATES IN UNION OFFICE:

Nicolas Y H Chong, Orhan W D Ertughrul, Seamus P Gallagher, George Misseyannis, Mark J Randall, Tajinder S Sandhu, Simon E Spero, Andrew D Turner

### COLLEGE REGISTRATION SLIPS:

Nicolas Y H Chong, Orhan W D Ertughrul, Seamus P Gallagher, Shiraz I Hussain, Wai-Yee M Kwok, Marcos Mari, George Misseyannis, Julian P Morelli, Mark J Randall, Tae J Suh, Andrew D Turner, Georgina J Waide

Also handed in from Freshers Fair: Glasses in grey plastic case

## AUDITIONS

For Dramatic Society production of Woyzeck (by Georg Büchner). No acting experience necessary.

**Come to Dramsoc in far right hand corner of Beit Quad at top of stairs**  
**2.30pm Wednesday 11th October**  
**or 2.30pm Sunday 15th October**





This week has seen the beginning of the College's breakdown of promises. I am not talking about the official prospectus; I am talking about Olave House. John Smith promised that last year's purchase of Olave House would not burden the residence system and would therefore have no effect on rents in other halls such as Southside and Evelyn Gardens. I believe this promise. Sadly, Mr Smith will be leaving the College after Christmas and the hoods in Sherfield are going to do their best to see otherwise. Malcolm Aldridge has said that he expects to see the house enter into the Residence system this year, if Students Residence Committee agrees to it. Don't forget that SRC is only an advisory body, however. If the College wants to force the decision they can and will. I believe that this year will see this move. If the College gets away with it, it will be the shittiest thing this College has done so far. College bought Olave House for £1.6m and it is now worth £1m: why should we pay for their cock-ups?

I have heard that student re-apps have been given free rooms in halls for the week before term on the

condition that they clean the halls. This is ridiculous. If they were working during the Summer, they would have received free accommodation and a wage. For information, the halls that I have heard about so far are Tizard and Willis Jackson House. Students had to clean fridges which the cleaners and housekeepers were too incompetent to arrange during the Summer. I might add that the fridges had various flora and fauna growing in them over the summer, which would have broken every health and safety rule under the sun, if the right people had been informed. I shall have no qualms about doing so in the future, after this. Could the lady in charge of arranging things like the summer letting of halls please tell me why she is ripping off students like this? Yes Loretto O'Callaghan, you have used slave labour in order to scrape a few extra pounds out of the summer lettings. I might add that the most ridiculous instance of ripping off students is Joe Cartwright, Willis Jackson Warden. He charged a student £3 for removing an extra chair from his room at the end of last term. I know you messed up your hall amenities account Joe, but do you have to go round creaming it off the students to make up for it?

I must apologise for calling the Rector a conniving git in the last issue of FELIX. I have decided that the simple term 'twit' would be far more accurate after his speech at the Freshers' reception on Monday; conniving, after all, implies too great a deal of cunning thought. I am standing here now, of course, with my paint brush in hand, waiting for the 'grown-ups', which I am sure include Professor Ash, to teach me how to paint my room. I thought 'Magnolia' would be a novel shade.

#### Credits

I seem to have run out of space, so I should just like

to thank the following for collating the last issue: Rachel Wilson, Louise Lucas, Emma Skitt, Rufus Isaacs, Alex Ball, Alex Challis, BJ, Gwyn Jones, Morgan Pimblett, Chris Horne, Cathy McClay, Alistair Goodall and Ruth, Jason, Adam, Liz, Chris Stapleton, Doug King, Fiona Nicholas and Neil McCluskey (up yours Bill, we still get on.)

The biggest thanks of all must go to Jason Lander for his science special, including 'The shit article.' Immense thanks also to News Editor, Adam Harrington and his growing team of reporters, including Pippa Salmon and Iain Stewart. Welcome and many thanks to Neil Lavitt for working so hard on getting some gig reviews for the future. Thanks also to Business Manager, Stef Smith; Features Editor Liz Warren; MAC for reviews; Simon for popping in to help paste—welcome!; Chris Leahy for Music; Lorraine Rogerson and B.A. Costello for books; Richard Crouch and Chris Stapleton for the Cartoon feature; Andy Waller for the Salads; BJ for the ents info, and Andy Bannister for being an all round nice guy and help. Thanks, as always to Rose and Andy for the hard work and patience, and the anonymous sources, who shall remain forever so.

#### Staff meeting

There will be meeting to discuss the next issue today at 1pm in the FELIX Office. If you are interested in getting involved, please drop in.

Dave

FELIX is published by the editor for and on behalf of Imperial College Union Publications Board and is printed by the Imperial College Union Print Unit, Prince Consort Road, London, SW7 2BB (Tel. 01-589 5111 ext 3515). Editor: Dave Smedley. Business Manager: Stef Smith. Advertising Manager: Ramin Nakisa. Copyright FELIX 1989. ISSN 1040-0711

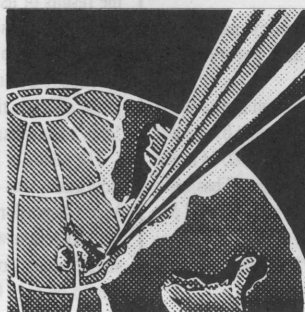
## A WORLD OF OPPORTUNITIES ON OFFER WITH ICI OVER CHRISTMAS

The career opportunities for graduates in the 1990's seem to be becoming increasingly diverse. As a result, more and more students are looking for their first job within organisations that are international, flexible, competitive and world leaders in technical innovation.

With so much to look for, it is an advantage to get an early introduction to such an organisation and meet the people within it.

ICI's Christmas courses provide the ideal opportunity to find out more about the people and careers described in the corporate literature.

If you're interested in attending a Christmas course in Engineering, Marketing, Physics, Chemistry or Material Science, or you just want to find out more about a career in ICI, contact your careers office and ask for the relevant ICI brochure and application form.





# AUT pay claim

The national executive of the Association of University Teachers (AUT) has recommended a salary claim of 27% for University staff.

The document is being considered by AUT members and may be adopted as policy at a special council meeting on Saturday 14th October. The AUT claim that the increase is needed to 'halt the appalling decline in academic related salaries over the past decade'.

A spokesman for the AUT told FELIX that the claim was 'high with respect to the last pay claim, but not with respect to comparable jobs' and that it was 'certainly not unreasonable'. She added that the Chancellor of the Committee of Vice Chancellors and Principals (CVCP) were 'unlikely to award the full whack'. On the possibility of a strike she commented that such thoughts were 'weeks ahead'.

The Rector, Professor Eric Ash, said that 'Academics are grossly underpaid and it's about time the Government realised this'. During the last AUT strike over pay claims Professor Ash wrote a letter to *The Times* condemning the AUT's action.

# Poll tax protest

The main event at yesterday's Union General Meeting was the final Union policy on Poll Tax. An original motion, proposed by Mr Edgar Denny, of Socialist Worker Students Society, was amended to call for the Union to 'support and coordinate any lawful action against the Poll Tax.'

The original motion instructed the Union Executive to write to the College, demanding that they do not hand over names to the Poll Tax Registrar. Mr Denny explained that he did not actually expect the College authorities to comply, but it would let them know the student position. No such letter will now be written according to the motion amended by Hal Calamvokis.

Other matters included announcements of financial assistance for parents who put children into the day nursery and a new election for the IC Union Women's Officer following Nicky Fox's resignation due to work pressure.

# Willy J deficit

Willis-Jackson House is charging five pounds to each of last year's residents to balance the £750 which was overspent last year.

Mr Joe Cartwright, warden of Willis-Jackson House stated that some of this deficit was due to overspending by the last warden, so he was only responsible for about £580 of it. He blamed it on an error in the accounting system. 'I basically made a mistake as to how much it would all cost' said Mr Cartwright.

Union President Neil McCluskey said 'If anyone complains the Union will back them all the way'.

# Residence losses

A loss of £175,000 was made on the Student Residence Account's £2.4 million turnover last year. This follows a £100,000 loss in the previous year.

John Smith, College Secretary, told FELIX that a large proportion of the money had been spent on bringing the residences up to fire safety standards. He also commented that money was being spent on improving the general standard of accommodation, which would slightly reduce maintenance costs in the future.

Mr Smith suggested that the continuing losses could be reduced by 'good management' of student residences, in particular by reducing the number of rooms which are vacant at any given time. 'There are always opportunities to make things better', he said, in defence of the past standard of management.

# Honda founder

Mr Soichiro Honda, the founder of the Honda Motor Company, visited the college on Tuesday for the first time since being made a fellow of Imperial College on last year's Commemoration Day.

The last time Mr Honda came to college was in 1982 to view the site for the wind tunnel. With other members of the Honda Foundation, the party visited the Honda sponsored wind tunnel in Aeronautics and demonstrations of Neural Networks and Electrochromotography in Electrical Engineering. Following the departmental visits, the group lunched with the Rector.

Mr Honda is currently on a world tour, the next port of call being a new car factory in Toronto, Canada. The Honda Foundation was formed after Mr Honda retired from the Motor Company in 1973, its activities are aimed at studying human problems with respect to the broader issues related to technological development.

# Unions surveyed

The Department of Education and Science officially released the results of its survey into student unions last week. The report, which is a factual analysis of the survey, has taken three months to complete.

A spokesperson from the DES said that the delay was to allow officials time to think carefully about policy, but he 'didn't know exactly what influenced the publication date'.

The policy of Mr John MacGregor, Secretary of State for Education, was outlined in his speech to the Committee of Vice Chancellors and Principals (CVCP), in which he said that no action was to be taken against the expenditure of student unions on political activities, as the survey showed this to be only 0.5% of their annual budget.

# Council battle

Hammersmith and Fulham Borough Council is fighting a legal battle over their £400 million money market loss and the council auditors claim that they may not be compelled to pay the debt. The council was acting outside its legal powers in speculating its £6 billion in the first place they said.

A spokesman told FELIX 'I don't think that Housing Benefit will be affected' but declined to comment pending a court case.

# Dramsoc success

Imperial College Union Dramatic Society's (ICDS) acclaimed Edinburgh production of *Huis Clos* by Jean-Paul Sartre will be performed in the Union Concert Hall on Friday 13th October. The production was described in *The Scotsman* as having 'admirably succeeded in providing both precise acting and a claustrophobic atmosphere'.

The performance will start at 8pm and tickets cost £2.50/£2.00. All enquiries should be directed to Adrian Pagan on ext 3531 or 3533.

# Big bang

'The birth of the cosmos' was the title of a speech given by Professor Paul Davies from the University of Newcastle on Wednesday, in the Great Hall.

He gave an account of current thinking on the big bang, the event that began our universe. He explained that this was not just 'any old bang', but a well balanced affair which contained enough explosive energy to prevent the universe collapsing before life had a chance to appear, but not too much to spread its material too thinly.

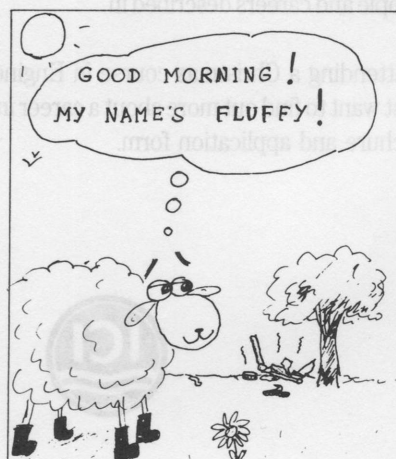
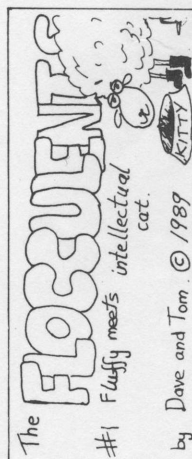
# Motor mania

City & Guilds Motor Club are running a competition for budding racing car drivers. The winner will be awarded an initial trial at Brands Hatch, all costs included. Further details are available from City & Guilds Union Office.

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**THE TIMES**

*From the Editor*

Dear Student

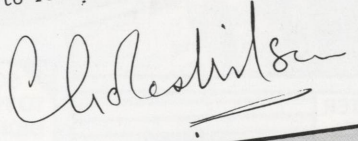
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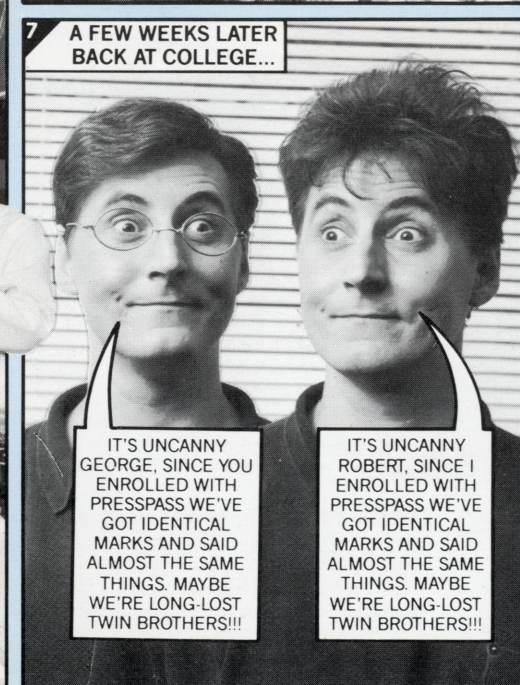
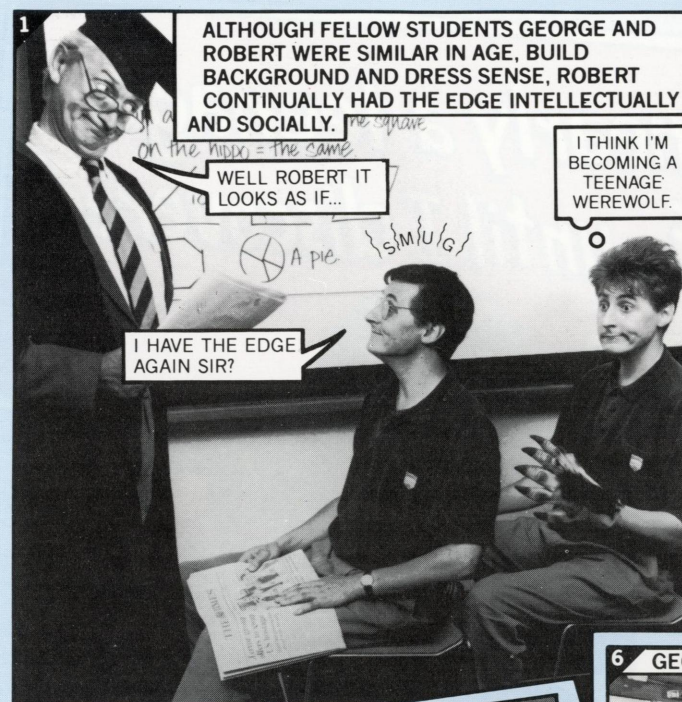
  
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