

Imperial in space

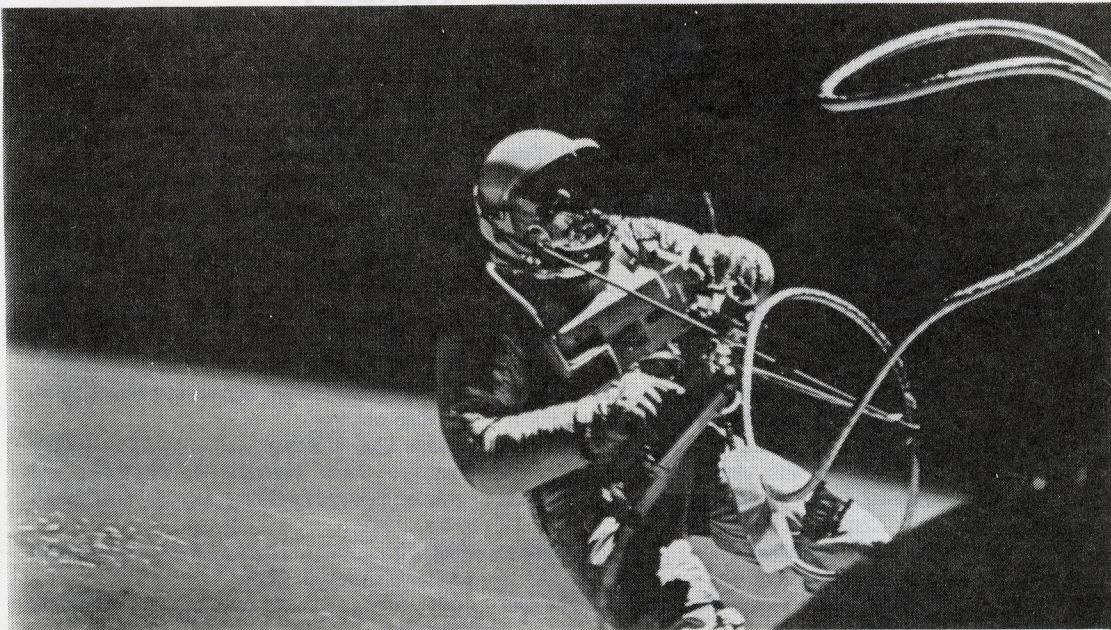
Two academics from Imperial College are to put experiments up in the highly publicised 'Juno' mission. Professor Blow, head of the Biophysics group, will be putting up an experiment to in which it is hoped to crystallise an enzyme fundamental to the Human Immunodeficiency Virus (causing the disease 'AIDS'). This should help the in-depth study of the enzyme.

Dr Andrew Goldsworthy, of the Plant Technology group of the Biology

department, is co-ordinating an experiment studying the effects of weak magnetic fields on wheat seeds in low gravity. He explained that plants do not grow properly in low gravity as the roots cannot grow 'down'. 'It might be important to grow plants in future life support systems', he said. Dr Goldsworthy said that it was hoped that magnetic fields could substitute for gravitational fields. He is being helped by a Biology undergraduate, Mr Jason Hatton, who has

been running an earth-bound version of the same experiment for some time.

The experiments are expected to be launched in November in an unmanned probe called 'Progress'. This will rendezvous with the 'Mir' space station in April 1991. Cosmonauts in the station will initiate all the experiments, and will photograph the results. The seed chamber will be recovered later for electron microscopy analysis.



Nalgo reaction

Paul Shanley, Murray Williamson and Chris Stapleton were ratified as next year's Union President, Honorary Secretary and FELIX Editor at a UGM held on Thursday.

Details of the schedule for new election for Deputy President were also made available. Papers will go up on Monday 12th March and come down on Friday 23rd March. Publicity can be put up from 16th April and voting will be in all departments on Monday 30th April and Tuesday 1st May. The dates of hustings have not yet been decided, but will be between Monday 23rd and Friday 26th April.

Elections were also held for several Union posts. Dylan James, proposed by Ashley Unitt, was defeated by new election for the post of External Affairs Officer. Hal Calamvokis, this year's Rag Chairman, spoke on behalf of new election, explaining that he felt Mr James' political views would make it difficult for him to take appropriate decisions at short notice when there was no official union policy to guide him.

Other Union officers elected were Stephen McCabe (aka BJ) as Ents Chairman, Nicholas Marley as House Committee Chairman, Suzanne Ahmet as

UGM Chairman, Caroline Cruttwell as ICCAG Chairman and Steve Farrant as Rag Chairman. No nominations were received for the posts of Internal Services Officer, Academic Affairs Officer or Welfare Officer. Papers for these posts are still up on the Union noticeboard.

Union President, Neil McCluskey explained in his report that the trustees of the Harlington Gravel Fund had met and agreed that laying of the hockey astroturf should begin as soon as possible to ensure that the pitch would be ready for the next season. Later he said that the trustees wished to formulate a policy for the use of the fund in conjunction with the sports clubs. He said that if anyone had suggestions for how they felt the money could be spent, he would like to hear from them as soon as possible.

During the meeting, the Union Honorary Secretary, Fiona Nicholas, read a statement issued by the Union Permanent Staff who are members of the National Association of Local Government Officials (NALGO). A copy of the statement, unsigned and on unheaded notepaper, was sent to the Student Television of Imperial College (STOIC) studio.

The statement read by Ms Nicholas

said:

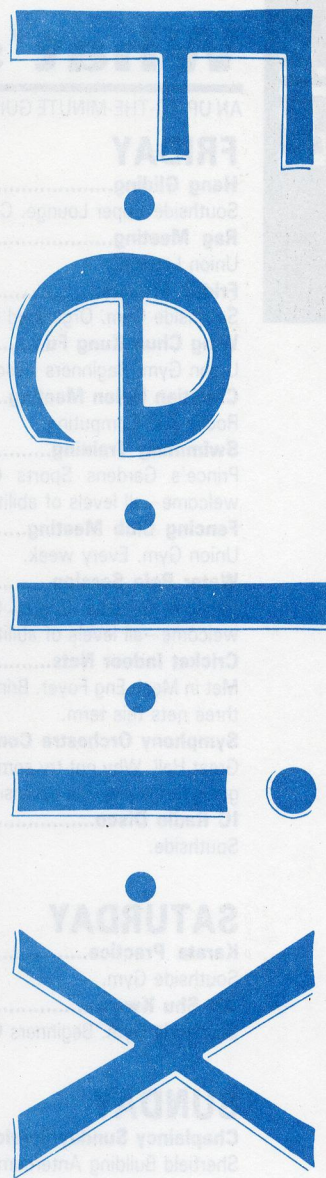
'I have been requested by the NALGO members of the Union staff, ie Pat Baker, Michelle Began, Reggie Blennerhassett, Jen Hardy-Smith, Yve Posner, Louise van der Straeten to read this statement on their behalf in reply to certain inferences contained in the Felix Editor's editorial in the sabbatical elections result flysheet published on Wednesday.

'At no time whatsoever was an approach made to Registry or even considered by any of them, to enquire about Mr Shanley's record.

'They also consider unfounded conjectures of this sort are offensive, ill-conceived and not conducive to the establishment of a good working relationship between the Union Office staff and future sabbaticals.'

After the statement was read, Mr McCluskey pointed out that Imperial College Union do not have a written 'staff protocol', unlike the University of London Union, where nobody is allowed to discuss the conduct of permanent staff.

FELIX Editor, Mr Dave Smedley, later said that he 'stood by everything that he had said'.



Issue 864
Friday 9th March



What's On

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

FRIDAY

- Hang Gliding**.....12.30pm
Southside Upper Lounge. Come and get high.
- Rag Meeting**.....12.35pm
Union Lounge.
- Friday Prayers**.....1.00pm
Southside Gym. Organised by IC Islamic Society.
- Wing Chun Kung Fu**.....4.30pm
Union Gym. Beginners lessons.
- Christian Union Meeting**.....6.00pm
Room 308 Computing.
- Swimming Training**.....6.30pm
Prince's Gardens Sports Centre. New members welcome—all levels of ability.
- Fencing Club Meeting**.....6.40pm
Union Gym. Every week.
- Water Polo Session**.....7.30pm
Prince's Gardens Sports Centre. New members welcome—all levels of ability.
- Cricket Indoor Nets**.....7.45pm
Met in Mech Eng Foyer. Bring your whites, we have three nets this term.
- Symphony Orchestra Concert**.....8.00pm
Great Hall. Why not try some culture instead of just going to the pub. Bar extension 'til 12.00 afterwards.
- IC Radio Disco**.....8.30pm
Southside.

SATURDAY

- Karate Practice**.....10.00am
Southside Gym.
- Wu Shu Kwan**.....4.30pm
Southside Gym. Beginners Class.

SUNDAY

- Chaplaincy Sunday Service**.....10.00am
Sherfield Building Anteroom.
- Wargames**.....1.00pm
Senior Common Room, Union Building.
- Wu Shu Kwan**.....4.30pm
Union Gym. Beginners Class.
- RCSU Night in the Bar**.....7.00pm
Meet in the Bar. Every week.

MONDAY

- RockSoc Meeting**.....12.30pm
Southside Upper Lounge. Interested in any form of Rock Music? Come along and have a beer.
- Cross Country & Athletics**.....5.30pm
Union Gym. Jogging in Hyde Park and socialising later in Southside.
- Keep Fit**.....5.30pm
Southside Gym with Vicky.
- Improver's Ballroom**.....6.00pm
JCR. Dance Club.
- Beginners Rock 'n' Roll**.....6.45pm
SCR.
- Swimming Training**.....6.30pm
Prince's Gardens Sports Centre. New members welcome—all levels of ability.
- Advanced Ballroom**.....7.00pm
JCR.
- WellSoc Talk**.....7.30pm
LT1 Physics. Prof Laithwaite will give a talk on 'Variations on a gyroscope'.
- Karate Practice**.....7.30pm
Southside Gym.
- Water Polo Session**.....7.30pm
Prince's Gardens Sports Centre. New members welcome—all levels of ability.
- Latin American Dance**.....7.45pm
SCR. Beginners.

- Latin American Advanced**.....8.15pm
SCR.
- Medals in Ballroom**.....8.00pm
JCR.

TUESDAY

- Audio Society Meeting**.....12.30pm
Union Senior Common Room. Cheap records, tapes and videos. Order on Tuesday and collect on Thursday.
- CathSoc Mass**.....12.30pm
Mech Eng 702. Followed by lunch.
- Sailing Club Meeting**.....12.30pm
Southside Lounge for 'Guinness and Gossip'.
- Ski Club Meeting**.....12.30pm
Southside Lounge.
- ICU Radio Modellers**.....12.30pm
Southside Lounge.
- Riding Club Meeting**.....12.30pm
Southside Lounge.
- Boardsailing Club Meeting**.....12.30pm
Southside Lounge to sign up for Wednesday and weekend trips.
- IC Anti-Poll Tax Group**.....1.00pm
Above Southside Bar, Prince's Gardens. First Meeting.
- Ents Meeting**.....1.00pm
Union Lounge.
- Student Christian Movement**.....5.30pm
Chaplains Office, Basement Flat, 10 Prince's Gardens.
- Keep Fit**.....5.30pm
Southside Gym with Alice.
- Amnesty Group Meeting**.....5.30pm
Brown Committee Room.
- ICU Radio Modellers**.....5.30pm
Mech Eng. Student training workshop.
- Christian Union Prayer Meeting**.....5.40pm
Huxley 411.
- Wine Tasting**.....6.00pm
Senior Common Room. Everyone welcome.
- Canoe Club**.....6.00pm
Meet in Beit Quad or we can be found in Southside Upper Lounge from 8.30-ish. Beginners welcome.
- New Beginners Ballroom**.....6.00pm
JCR.
- Judo**.....6.30pm
Union Gym.
- Intermediate Ballroom**.....7.00pm
JCR. Dance Club
- Improver's Ballroom**.....8.00pm
JCR.

WEDNESDAY

- Sailing Club Meeting**.....12.30pm
Outside Southside for sailing.
- Rag Collection**.....12.30pm
Round the city pub crawl, fancy dress treasure hunt. Teams of 4-6. Register in the JCR. All in aid of MENCAP.
- Keep Fit**.....12.30pm
Southside Gym with Vicky.
- Wargames**.....1.00pm
Senior Common Room, Union Building.
- Midweek Service**.....1.00pm
Holy Trinity Church, Prince Consort Road.
- Cycling Club Training**.....1.00pm
Meet Beit Arch.
- Wing Chun Kung Fu**.....1.00pm
Union Gym. Beginners lessons.
- Ten Pin Bowling**.....2.00pm
Meet at Gloucester Road tube.
- International Night Video**.....3.00pm
Union Snack Bar.
- Wutan Tai Chi Chuan**.....3.00pm

Union Lounge. Instructor Hong Chun Lai. Martial art for all ages and sexes.

- Ladies Only Water Polo**.....6.30pm
IC Sports Centre. Enthusiastic new members welcome—any ability.
- Munch & Merriment**.....6.30pm
Materials Society present an evening of fun, feasting and frolics. Tickets still available from Room B522 (RSM).
- Cloud 9**.....7.30pm
In the Concert Hall. Tickets £1.50 and £2.00.
- Wu Shu Kwan**.....7.30pm
Union Gym. Experts class.
- FREE DISCO**.....9.00pm
In the Union Lounge Nightclub until 1am.

THURSDAY

- Christian Union Prayer Meeting**.....8.15am
Chaplaincy.
- Audio Society Meeting**.....12.30pm
See Tuesday's entry.
- IC Fencing Club**.....12.30pm
Union Gym. Every week.
- Methodist Society Speaker Meeting**.....12.30pm
Chemistry 231. Everyone welcome.
- Gliding Club Meeting**.....1.00pm
Aero 266. Come along to arrange your first flight.
- ICSF Library Meeting**.....1.00pm
ICSF Library (below Beit). Members can borrow from 1,700 books.
- YHA**.....12.30
Southside Upper Lounge. Sign up for weekend break. Everyone welcome.
- Balloon Club Meeting**.....1.00pm
Southside Upper Lounge. All newcomers and hardened balloonies welcome. Sign up for weekends in the clouds.
- Keep Fit**.....5.30pm
Southside Gym with Alice.
- Judo**.....6.30pm
Union Gym.
- 'Sex, Lies & Videotape'**.....7.30pm
Mech Eng 220. 50p to Filmsoc members, £1.50 to others.
- Cloud 9**.....7.30pm
In the Concert Hall. Tickets £2.00 and £2.50.
- Karate Practice**.....7.30pm
Southside Gym.
- IC Radio Disco**.....8.30pm
Next to Southside Bar.
- ICCG Soup Run**.....9.00pm
Meet Week's Hall Basement Kitchen. Deliver food to London's down and outs.

NEXT FRIDAY

- Rag Meeting**.....12.35pm
Union Lounge.
- Friday Prayers**.....1.00pm
Southside Gym. Organised by IC Islamic Society.
- Swimming Practice**.....6.30pm
See Monday's entry.
- Water Polo Session**.....7.30pm
See Monday's entry.
- IC Radio Disco**.....8.30pm
Southside.

SWIMMING & WATERPOLO CLUB

...cordially invites you to join us at our annual 'end-of-year' dinner, to be held on:

Wednesday 21st March
Southside Bar from 7.30pm

Dinner will be at 'Texas Lonestar' and will hopefully be subsidised!

Guests are welcome to attend
RSVP

All the Wrong Places

Book

by James Fenton

The knack of becoming a journalist; in particular a foreign correspondent covering the most turbulent countries in the world is to let events flow over you and then pick out the choicest morsels to turn into your stories.

James Fenton has been covering turbulent events in the world for over twenty years, revolutions both violent and political have all been revealed to the world.

He is very much an individual, rather than going with the crowd he is prepared to go it alone, find his own stories, make his own stories come alive. This does tend to lead him into what can only be described as interesting situations. Things like hitching a lift on the first tank to storm the palace in Saigon, or enter Marcos' personal suit only minutes after the dictator has fled, all these things add up to a slightly dangerous, almost precarious life. One thing is for certain, life is never dull.

Asia has always been a place of extremes, wealth and poverty, dominance and subversion, they have all played their part in changing the face of a continent. Democracy is always portrayed as the solution to all the evils of dictators but it is an unnatural medicine for south east Asia. In this part of the world they have known nothing but dictators, monarchies or anarchy, and little if anything has

changed in the last few decades.

The book is a series of accounts portraying the personal effects of revolt; from Vietnam to Kampuchea, the Philippines to Korea, and how the ideas of the few effect the masses that have very little say in what happens.

Each story shows a different side of the coin, the decadence that was overthrown in Korea, the brutality and terrorism in Kampuchea and foreign empire building that went wrong in Vietnam. They are well written and interesting, producing a clearer picture of the sequence of events than you could from the bits and pieces that get churned up at every opportunity in history programmes

The book is written in an informal and relaxed style, but you do need to have a basic idea of the events as he does not stop and explain the background to the events that he chronicles, so brush up on your twentieth century history before reading this book.

Perhaps the best reason to by the book, apart from the obvious requirements of being enjoyable, is that it is unbiased and truthful.

For this reason I can recommend this book as a good factual read that is light and interesting and well worth the effort.

Ian Hodge.

Shadow Makers

Film



What does *Fat Man and Little Boy* mean to you? To most of America apparently it was taken for the name of a duo comedy film. They were probably rather surprised to discover that it was all about the construction of the first two atomic bombs. To prevent the same thing happening here it has been renamed *Shadow Makers*.

General Leslie R. Groves (Paul Newman) was responsible for building the pentagon. He has now been assigned to a different task—the construction of an atomic bomb. He assembles a team of America's greatest minds led by J. Robert Oppenheimer (Dwight Schultz, best known as Mad Murdoch from the *A-Team*, but unrecognisable), who set to work on the device. The General convinces them that they are working to beat Germany to the bomb. When he eventually discovers that The Nazis are not working on the bomb, he hides this from them. Victory in Europe is declared, but still work progresses. Slowly, though, discontent grows among the scientists.

This is not a purely factual retelling of the events leading up to the nuclear attacks on Japan, as certain sections have been fictionalised. Most noticeable of these is the horrific death of one of the team when he is subjected to a fatal dose of radiation. Still the majority is based in fact, and it should make for a gripping tale.

Most of the drama arises from conflict. Principally this involves disagreements between the military (Groves) and the scientists (Oppenheimer) as well as the internal struggle between the scientists' consciences and their desire to harness the basic power of creation. A perfunctory love interest is introduced for the scientist doomed to die of radiation poisoning, but her sole purpose seems only to be making his death seem more tragic. We also see Oppenheimer forced into a dilemma over his mistress—a rather crude symbol for the abandoning of his humanity perhaps?

It has to be said that for most of the film one cares little about what is going on. It is only in the last hour or so that the horror of the bomb is shown at all. There are two eerie and frightening scenes at the first testing of the bomb, as well as the oft mentioned radiation death to convey the strongly anti-nuclear stance of the film. This along with some moralising about life and nature is all there is to commend a rather boring film, which could have been a dark warning against the terminal nuclear path humanity has taken.

Adam T.

Plaff!

Film



Plaff! is a Cuban comedy about throwing eggs; plaff being the Cuban word for 'Splat'. The story is a fairly straightforward one about a rotund, middle-aged housewife, Concha, who is the target for the aforementioned eggs. This distresses her somewhat because the eggs are a bad omen in Santeria, the unofficial afro-based religion of Cuba. Whoever is throwing the eggs obviously wants Concha out of her house, the question is who is it? The suspects are numerous, including a neighbour who had an affair with Concha's late husband, Thomas, Concha's surprisingly persistent admirer and Cartia, who is married to Concha's son José Ramon and to whom Concha has taken an avid dislike. Just as Concha thinks she has worked out who it is and accuses them, another egg is thrown and eventually it all becomes too much for her.

Much of the humour in this film centres around rather bad cinematic gags such as missed cues, sound problems, atrocious editing and the film starts in the second reel, going back to the first at the end. None of this works very effectively especially since it is easy to imagine a lot of Cuban cinema being genuinely like that. There is also quite a bit of slapstick comedy such

as inappropriately placed filing cabinets which everyone walks into and of course the eggs which is either hilariously funny or embarrassingly juvenile depending on your taste in comedy.

Perhaps the most effective aspect of the film is the way in which it satirises everything: religion, bureaucracy, family relationships and life in general. One amusing episode involves Clarita who is a chemical engineer. She has discovered how to make a polymer out of pig excrement and eggwhite which absorbs precious metals exclusively from sea water. She is prevented from developing it by government bureaucrats, that is, until an emotional outburst on television by her husband, José, who is a baseball star.

I would describe this film as light rather than funny although if you happen to be Cuban it is probably a lot more amusing. Unless you understand the ins and outs of Cuban life much of the satire is likely to be lost. *Plaff!* runs for three weeks at the ICA Cinema as part of a season of films and talks celebrating the work of black comics, comedy writers and film makers.

Liz.

The War of the Roses

Film

How often do you see a film that totally redefines a term like swinging from the chandeliers? *War Of The Roses* is that sort of film. A lawyer (Danny DeVito) is talking to a client who is contemplating divorce. As a warning he relates the tale of Oliver and Barbara Rose, friends of his. They met at an auction, both bidding for the same object. Soon they were married. Oliver peruses a successful career in law while Barbara bears the children and sets up a perfect home for her husband. Unfortunately there is trouble in paradise. When the children leave home Barbara decides to set up a catering business of her own. Then when, by chance, she gets a brief glimpse of life without Oliver, she decides she likes it—and asks for a divorce. Then when neither will give up the perfect house, it turns into a battleground...

Director DeVito has gathered together the *Romancing the Stone* team (himself, Michael Douglas, Kathleen Turner) for this movie and without a doubt it was a good move. There is a chemistry between the three that survives the transition into a totally different set of characters. Douglas and Turner successfully and convincingly portray the change in the couple's attitude to one another, from being madly in love to madly in hate. The addition of the superb Marianne Sagebrecht (*Bagdad Cafe*, *Rosalie Goes Shopping*) as the housekeeper was also an inspired choice, although she is sadly underused in the film.



The plot starts off as a fairly normal love story before making a leap into a bizarre battle between the couple—a surrealistic comedic version of *The Shining*, but with the pair of them crazy. This suits DeVito's unusual and imaginative directional style down to the ground, with camera angles and intercut scenes used to grotesque comic effect. Somehow, though, he manages to make the frankly unbelievable situations

that occur credible.

A literal battle of the sexes that also looks at marriage and divorce, while steering clear and occasionally parodying clichés, this is an excellent film. Very funny and very black it is well worth seeing, just don't take your boyfriend/girlfriend.

Adam T.

The Mis-^{Theatre} understanding

Glory

Film



Plays where characters are employed to disseminate philosophical and moral ideas can be profoundly stimulating and challenging but are often devoid of any 'conventional' form of entertainment. For those of us who go to the theatre to be entertained, two hours of Albert Camus' nihilist philosophy on stage, is not a mug of Earl Grey, milk, two sugars.

It's an interesting story though: a wealthy businessman returns to his mother's and sister's guest house after twenty years absence. Temporarily unable to reveal his identity he is murdered by them for his money. But then they find out...The cast are competent, if a little unimaginative and there are some interesting lighting effects. So if you're fed up with Aristotle and Descartes—try to understand this.

The Misunderstanding is currently playing at the Gate Theatre, Notting Hill. Box office 229 7061.

Adrian Pagan.

Page 4

Don't you hate film promoters? They're pushing this film as a star vehicle for Matthew Broderick. All right he plays an important role in the film but there is far more to it than that. Set during the American Civil War, it tells of the raising of the first black regiment to fight for the north. They were led by Colonel Robert Shaw, a white and a survivor of the battle of Antinam, when 40,000 people were killed in five hours (compared to 50,000 americans during the whole of Vietnam). Eager to go into combat against the southerners, they first have to combat prejudice amongst the higher ranking members of the Northern army.

With 1,000 men in the 54th the only way the producers could portray their struggles was to use a small group of slightly stereotyped men to represent the whole. Most notable of these are Trip, a runaway slave, and Rawlins, a grave digger turned sergeant-major. Trip, played by Denzel Washington (*Cry Freedom*), has suffered so much from racism that he himself has become racist, hating everyone with a white skin. Rawlins, played by Morgan Freeman (*Driving Miss Daisy*), is a voice of wisdom amongst the hot-headed impetuosity of the rest of the men. Under Rawlins guidance Trip learns to control and use his aggression.

The part of Col. Shaw is an unusual one for Broderick, but one he handles well, showing the colonel's transition from an introverted and naive young man to a battle hardened (but still idealistic) leader of men. Occasionally he is called upon to deliver lines which could easily sound corny, but which he manages to deal with remarkably well. He is showing signs of maturing into a fine actor.

The photography is often superb, many scenes sticking vividly in one's mind long after the film has finished. It is particularly effective during the battle



scenes, showing the true horror of war, with many horrific, but brief, scenes of death and injury. The film is less about war though, than about a group of people's struggle to achieve the respect that they are entitled to. Their final, almost pointless sacrifice and the eventual good that comes of it is very moving.

Glory is a remarkably emotional film, and one that involves the viewer totally. Its message is still relevant as the battle against prejudice these men were fighting has not yet been won.

Adam T.

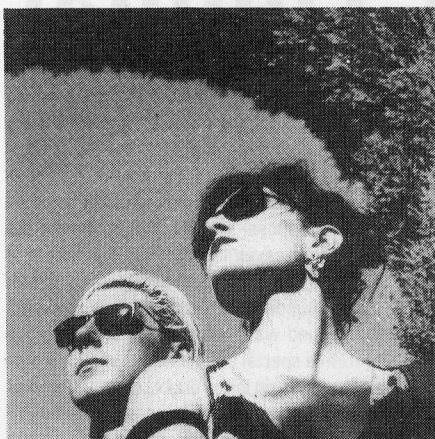
The Creatures

—Town & Country Club 1.3.90

The Creatures, better known as Siouxsie and Budgie of *The Banshees*, played the T&CC as the last date of their first ever tour, attracting a wide melange of listener, from the obligatory 'Sid's Not Dead' division to the floppy-fringed Danceniks via the Hairy folk and the odd ska nut.

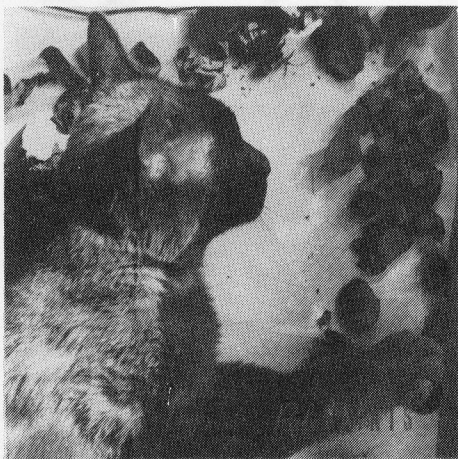
The Creatures play a very odd kind of music; most of it is written purely for vocal and percussion with the odd bit of synthetic brass thrown in for good measure. The percussion is based largely around andalucian rhythms and tribal beats of the chest-pounding variety (which action Siouxsie performed with surprising aplomb) but the vocal owes little to anybody and is delivered in classic Sioux style.

The crowd were appreciative from the beginning; the gig had more of the atmosphere of a gathering of friends than a concert, especially among the more hard-core admirers at the front of the pack. It took only a little verve on Budgie's part to get the audience moving; after that the whole event gained a momentum of its own through the war-dance atmosphere of half the songs and the pop subtleties of the rest. Siouxsie did her own special thing, dressed



her own special way and left to captivated applause from her legions of fans, only to return for two encores.

The Creatures have a single *Fury Eyes*, and an album *Boomerang* out on Wonderland Records. **Stone.**



The Jazz Butcher, Blow Up + Emerald Rain

—Dingwalls 26.2.90

Emerald Rain are another band who believe their deep meaningful lyrics. Stay in Humberside please. Music for Sundays. I'm sure IC Ents would like them.

Next came *Blow Up*, who call themselves the 'crossover' from indie to dance. They certainly got me gyrating to the funky rhythm. With the fuzz guitarist from *U.N.C.L.E.* and psychopathic drummer, their music is quite unlike anything else currently on sale. With songs like *War Toad*, I only hope that the singer would cheer up a little, even if the crowd was 40% Japanese tourists.

Jazz Butcher have a sense of humour. Not only does the singer wear red shades, but they sing about *Burglar of Love* and *Hey Bacon Face*. Gobble, gobble you too! What a combination—saxophone and feedback, or rap and distortion.

Unfortunately this frenzy didn't last. Most of the time, they sounded more like a Butlin's lounge band. Keep the mellow stuff to the hotels. *We want Mr Odd!* **SJH.**

The Pale Saints

—Comforts of Madness LP

The Comforts of Madness is the debut LP from Leeds' band, *Pale Saints*, following the widely acclaimed (and mercifully hype-free) *Barging into the Presence of God* EP.

First time through this LP sounded glossy, produced to the point where the music was a mere rush of the sound.

Second time the rush was full of detail; at times this album sounded like a showcase in which the *Saints* demonstrate their mastery of every style and sound a guitar can make. Every element of every track differs from any other, tracks melt into each other, via tiny set pieces of bizarre rhythm or flamelicks of guitar.

They can be intense (the pounding drums of *Way the World is* and the harrowing guitar of *Sight of You*) delicate and precious (*Life Hammer*) and stripped simplicity (the hook of *Sea of Sound*) and its accompanying aural diversions). The album doses with the steel-woven whimsy of *Sight of You*, re-recorded from the *Barging* EP and the joyful sting of *Time Thief*.

If you only enjoy LPs which come to the point, stick grimly to it for two sides and stop, you won't enjoy this album. Sharp, clear and, above all, multifaceted. The *Saints* know exactly what they're doing.

Stone.

We are Going to Eat You

—Marquee 21.2.90

Good opening sets from the *Pleasure Thieves* and *Beef* were witnessed by an appreciative audience and the club was packed and expectant when *We Are Going To Eat You* (*WAGTEY*) came on to prove themselves.

Appearing in a cloud of mist with a deceptively slow intro, the band then proceeded to charge their way through an hour long set of virtually non-stop indie rock. Songs were played at a frantic pace, and very little gap between songs meant that there was no stopping this party! The players themselves were enthusiastic, whilst not obviously stretching themselves musically, and performed together with a combination of energy and skill. Paul Harding (guitar)

admission :
ents £1
nus £150
others £2.00

TRAP DOOR "Indie Night"

every tuesday night from tuesday 27 february
bar til 1 am
music til 1.30 am

THE ONLY LONDON STUDENT UNION WITH A BAR PAST MIDNIGHT.

city university students union, northampton sq, ec1
tubes angel, barican, buses 38,171a,279,4,73,n90,n83
doors 8.30 no admission after 11pm roar

THE COSMIC GLITTER PIXIE GUIDE

Friday 9th

House of Love.....Royal Albert Hall
Ride.....LSE Student Union
Meerkats + World.....Fulham Greyhound
The Chills + McCarthy + Katydid.....ULU
UB40 + And Why Not?.....Brixton Academy
Chris Rea.....Wembley

Saturday 10th

Cut Cut Emma.....Herne Hill Half Moon
Boogie Down Productions
+ Queen Lafitah.....Brixton Academy
Cutting Crew.....Brixton Fridge
UB40 + And Why Not?.....Wembley Arena

Sunday 11th

Martin Stephenson & The Dintees
+ The Railway Children +
Five Guys Called Moe.....T&CC
UB40 + And Why Not?.....Wembley Arena

Monday 12th

Ned's Atomic Dustbin + UT.....Dingwalls
Death Bang Party.....Powerhaus
The Quireboys + Giant.....T&CC

Tuesday 13th

Pixies of the Week:
Felo-de-se + The Refuseniks +
Suicide Club + Slings &
Arrows.....The Robey, Finsbury Park
Gun + Slide.....T&CC
Goodbye Mr MacKenzie.....Subterrania

Wednesday 14th

Lush.....Subterrania, Ladbroke Grove
Mary Coughlan.....Dominion

Thursday 15th

Mary Coughlan.....Dominion
Furniture.....Middlesex Poly, London

Friday 16th

Mary Coughlan.....Mean Fiddler
Guana Batz.....Powerhaus, Islington

and Chris Knowles on drums were both especially impressive in their delivery.

Only a minor complaint to make, which was about the lack of introduction on the band or the songs, making it difficult to relate to them. However, neither myself or the rest of the crowd found this a problem, and *WAGTEY* deserved the two encores demanded of them.

WAGTEY have recently released an album *Everywhen* on an independent label. One single, *Ride upon the tide* has already been released, and a new single should be released soon.

Phil

This Week

● **Satellites may be examined remotely** by firing a low powered beam of neutral particles at them. This is a proposal put forward by scientists at the American Los Alamos National Laboratory in New Mexico. It would enable the purpose of any satellite, even military satellites, to be investigated, without damaging on-board computers.

● **The Malunya Caterpillar feeds only on leaves of coca plant** from which cocaine is produced. This could provide a means of stifling the drug plantations which could be smothered by caterpillars dropped from aircraft. The White House, however, has said that neither troops nor caterpillars would be deployed in the war against drug smuggling without the express invitation of the host country.

● **A long lasting marker dye** for emergencies at sea has been developed in Australia. Polythene microballoons are bonded to conventional dye particles with a water-soluble gum. The bubbles mean that the dye floats on the surface remaining visible for a couple of hours and is claimed to have no effect on marine life.

● **The enquiry into the explosion of an Ariane 4 rocket** a couple of weeks ago has begun. Only 6.2 seconds after launch, a drop in pressure in one of the four engines resulted in a large decrease in thrust. The other engines compensated for another minute until vibration shook it apart. The first stage exploded and the other two were destroyed remotely along with its payload, two Japanese communications satellites.

● **Clusters of Krypton gas atoms** have been made by chemists at the University of Sussex. Although Krypton is an inert gas, when cooled and forced through a 200mm hole clusters of up to 340 atoms have been formed. The weak interatomic forces are sufficient to hold the atoms together at low temperature.

● **ALIENS.** Do they exist? A light-hearted BioSoc lecture by Joanthon Cowie, Thursday 18th March, 5.30pm, West Beit Quad Rooms W2/W3.

THE NUCLEAR DEBATE

'Nuclear power is the safest practical energy source for the future'

Put by **Dr John Gittus**, Director General of the British Nuclear Forum and opposed by **Andy Sterling** of Greenpeace

Lecture Theatre 220, Mech Eng, Imperial College, March 12th, 6.30pm

Coinciding with a series of ecological debates to be broadcast on the World Service Tim Grant-Smith, of the BBC, describes Sweden's policies for nuclear waste.

Criminal Waste

'Sweden has the world's only hard-rock nuclear repository': after the initial image of Swedish heavy metal bands being walled up for eternity, the scale of the undertaking sank in. Of all the dozens of nations running nuclear power plants, only Sweden has built a proper waste disposal site fifty metres below the sea-bed in granite caverns and silos. The waste is encased in concrete or steel and packed in concrete-lined vaults surrounded with bentonite clay to absorb and deflect ground water flow. Huge carriers move the waste from a special double-hulled ship down an electrically heated ramp into a bright, clean automated world beneath the sea, eerily quiet and smelling of fresh paint. Around the main control block, where consoles and computers monitor the silo and the four storage tunnels, there are whimsical human touches:



Britain's approach: Nuclear waste reprocessing at Sellafield in Cumbria.

a mock house front projects from a rock wall, and a shop mannequin in black wig and decollete blouse peers out of a false window. Further on, past hanging trees of green cloth, there is an old wooden skiff moored to a tiny jetty beside a wall painted as a sea shore.

Back up system and remote cameras are much in evidence—the mammoth transporter can be driven by remote control over electric guide cables in the floor, and radar in its bumpers stops it automatically before any solid object—human or rock.

This impressive site at Forsmark on the Baltic coast 160 kilometres north of Stockholm is intended to keep Sweden's low and medium level nuclear waste for five hundred years, by which time its radioactivity will have decayed to normal background radiation levels. But after a thousand years, the present under-sea repository will be on the surface of dry land, such is the rate of Sweden's isostatic lift—the 'rebound' from the burden of 2 kilometres depth of ice over scandinavia in the last Ice Age.

That's just one of the problems facing planners as they consider what to do with the real problem—the spent nuclear fuel that may need to be kept safe for 250,000 years, perhaps several ice ages. It's a problem so enormous that even the resourceful Swedish won't make a decision on a permanent repository for another ten years.

Sweden is unique in another way too: of all the Western nuclear-powered countries it alone has decided by referendum to abandon nuclear power, and to do it without increasing CO₂ emissions or hydro-electric capacity. This rigid policy strait-jacket even has a timetable—one nuclear station to be phased out in 1995, one in 1996 and the remaining ten by the year 2010. The stricter timetable was adopted after

the Chernobyl accident—first detected in the West by devices at Forsmark.

Half of Sweden's electricity generation is nuclear, and the Swedes have a high rate of energy use per capita—hardly surprising given their uncompromising climate. Nevertheless energy experts like Professor Thomas Johannson of Lund University believe that the nuclear element can be replaced: increased efficiency, he believes, could have the power demand, and biomass and cogeneration schemes (using the heat now wasted in the generating process) would fill the remainder. Bioenergy plantations of willow and alder would be needed and efficient gasification processes used on the resultant feedstock, but on paper Professor Johannson has shown that the strict timetable is achievable.

It requires bold policy decisions, legislation and incentives to shape that solution: pricing changes, efficiency, rating of appliances, electricity service companies to improve efficiency and cut costs, and research and investments. In the ten years since the 1980 referendum, little of this has happened and a top level ministerial team is now examining the options, after hints that the timetable may be too tight to be realistic. Sweden's industries have threatened to move abroad if energy charges make them uncompetitive on world markets: the Swedish trade unions have also taken fright about possible job losses.

Then earlier this year, the energy portfolio was removed from the resolutely anti-nuclear Environment Minister Brigitta Dahl and given to the new Industry Minister, the former Deputy Chairman of the Landsorganisationen trade union group Mr Rune Molin. Mrs Dahl stressed to me that she was not disappointed in the move, and said she knew government policy had not changed: she is on the ministerial review and the decision in no way reflected weakening of government resolve. Professor Johannson even suggested that the move might be a pragmatic way of getting industry and the unions to accept the nuclear phase-out, under a minister more sympathetic to them.

But that is not how the public appears to see it: opinion polls show that although a majority still want the phase out completed on time, 70% now doubt it will happen. If a prosperous inventive open society like Sweden, with a government with a clear mandate and an assured parliamentary majority, cannot tame the nuclear industry, the outlook must be bleak for anyone else seeking a non-nuclear future.

Rugby Gutteridge Cup Final

On a wet, blustery Sunday IC defeated St Thomas's Hospital in the final of the Gutteridge Cup. A knock-out competition annually contested by all London colleges and hospitals (bar one—St Mary's—of course). IC last winners in 1986, already beating the holders, Kings College on the way to the final. Obviously Kings felt pretty displeased and regretfully the Cup was not returned in time for presentation at the final.

A strong IC team took to the field at Motspur Park to boisterous support from over 100 IC supporters. Immediately on the kick off IC scored a sensational try. Left wing Dave Fleming going over in the corner after speedy rucking from the pack and swift handling in the backs creating the overlap. This was to set the pace of the game. With everything at stake, both teams playing hard, fast rugby this was going to form a quiet clash.

IC needed as many points on the board as possible with the strong wind advantage in the first half, and didn't the boys do well?

Thomas's experienced backs were denied possession as the IC forwards played sensationally. Supporting one another all round the field, almost certainly first to every breakdown and cleaning up at the lineout. What is normally a straightforward ball winning procedure, even the scrum became an IC monopoly. All eight forwards were superb, playing like men possessed. Of these Pete Drew and John Fowler were outstanding.

Ball was provided so clinically and with such ease, scrum-half Simon Bicknell could completely control the game. Thomas's didn't do themselves any justice even with their hooker being sent off for unlawful use of his fist—what a silly billy.

Inevitably IC continued to put the points on. A forward drive at a five yard scrum gave flanker Brian Greensmith an easy try. Quick thinking from Simon Bicknell gave Dave Fleming a second try, after running a short penalty. Captain Rich Walters also putting over a few kicks to give IC a lead of 18-0 at half time.



With the wind strength increasing in the second half, Thomas's never looked liked scoring a try. Their only scores coming from two short penalties. IC continued their style of play, grand sweeping movements up field, knocking back the opposition players. Nearing the end, Thomas's heads began to drop, with superior fitness and an insatiable hunger, IC ran in two further tries. Dave Felming getting a third and the last for Fullback J F Lucas. With these the powerful chant of 'IC-IC' booming from the grandstand.

The IC players punching the air with delight on the shrill of the final whistle, they ran out resounding winners 26-6. All players performed superbly and

individual performances would be hard to pick out. However, the majority of observers agreed scrumhalf Simon Bicknell was man of the match. Now we had all afternoon and evening to get completely pissed. Thanks to everyone for support on the day. A day to remember!

CITY & GUILDS COLLEGE MAY BALL 1990

Friday 11th May
7.30pm for 8.00pm
at the FORUM HOTEL,
Cromwell Road

Tickets: £47 per double, now available
from Guilds Office

includes:

★magician ★disco ★cocktails ★dinner

Football

St Georges—0

IC 1sts—3

African artistry, Brazilian brilliance and Canadian class proved to be the ingredients that spiced up this dull encounter as IC's international contingent provided the goals that completed a comprehensive rout of Georges.

Despite the blustery conditions IC were never going to be blown off course, taking the lead as early as the fifth minute through Femi Omotoyo's only useful contribution to the game, a well-placed low shot. It would have been two a few minutes later after Pip Peel won and then missed a penalty.

Meanwhile back at the other end new boys Mike Wilkes and Paul Nelson were confidently coping with what little Georges attempted to throw at them, aided of course by ever present Chris Burton and Tim Fisher.

Two superb goals at the end of the first half clinched the game for IC, first Toni de Lyon rifled home a shot that the keeper didn't even bother diving for and then Pat Fancott (the biggest thing to come out of Canada since John Candy) with his back to the goal and the keeper clawing all over him produced a delightfully cheeky overhead kick that sneaked in at the post. The second half was so unbelievably dull that a certain goalkeeper spent the whole time practising his Jane Fonda workout. The only points of note were a Toni de Lyon shot against the post and a Pip Peel effort disallowed because Mr Omotoga had forgotten to get back outside.

Rifle

This week we would like to highlight one of the greatest, most useful members of our rifle team. This genius, showing skill rarely seen outside the Olympic circuit, has managed to get the entire team disqualified from the BUSF 'top twenty' team rifle competition.

How, you may wonder, did he managed to perform this feat? It was surprisingly simple, he shot for both Imperial College and the University of London 'A' team (without telling us), which could have caused problems if both teams had made it to the final!

So, to overcome this difficulty, the organisers decided, in a fit of rage, to disqualify us, but not UL as 'university teams take precedence over college teams'.

You may question yourself: Who is this superhero, this Demi-God, this giant amongst marksmen, this tool amongst adjustable spanners with special ratchet attachments, this complete and utter dork?

His name is MR SIMON CANE (MRE 1). If you see this fine gentleman please be sure to call him by his new title: Mr Spoons.

Despite the efforts of the above mentioned genius we are still able to compete in the BUSF individual competition, in which we are currently faring quite well although our final positions won't be known until the end of the competition.

Sailing

Having repaired boats damaged by last weekend's high winds, thanks to the heroic efforts of Henry Nebrensky the bosun, Imperial once again took to the water.

The first two races were Imperial 1sts versus Eyesores (an old boys team) and the superior experience of the old boys soon showed. The first race was won by the old boys by some sneaky tactics—namely pinching the best boats. In the second race certain members of the old boys decided to show Imperial 1sts how it was done, capsizing before the start and failing to get a good start. This led to a slightly better result for the first with a close win. The old boys then really started showing off with the most spectacular capsize of the day.

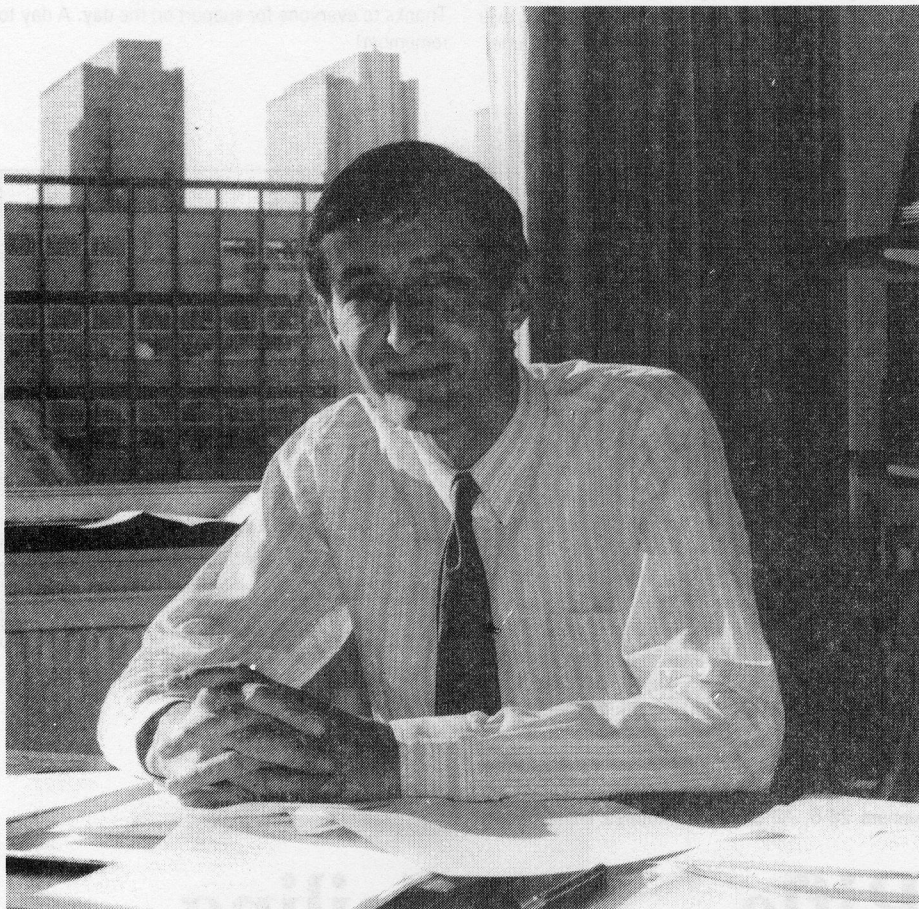
After lunch Imperial 2nds then took on the old boys, losing both races.

To even things out the 1sts, 2nds and old boys were then mixed up and several races run with these mixed teams.

All in all IC learnt a lot from the old boys, mainly how to capsize.

Liz Warren interviews Angus Fraser, Managing Director of IC. As the man whose decisions affect us all, he wants...

Value for money



The new College Managing Director, Angus Fraser, dominates any company he is in. Well over six foot tall, Cambridge educated and a graduate of the European Institute of Business Administration (INSEAD) at Fontainebleau, he has a distinguished career in international business behind him. His work has taken him to many exotic countries and he has lived in East and West Africa, France and Malaysia. Now, he has left the world of corporate boardrooms to deal with the equally complex problems of administering Imperial College. He studied History and Modern Languages for his degree before taking the course at INSEAD.

He sees his role at Imperial as 'very much as it was under the College secretary. The issues haven't changed simply by virtue of my appointment.' He feels that 'what has changed or appears to have changed is that, by virtue of coming out of a different kind of environment to do the job, the way I go about tackling fairly well identified issues is different'.

He says 'the administrative side of College, in crude terms, is my main sphere of interest.' This includes the self financing activities, such as residences and refectories. The College now has a Business Manager, Tom Stevens, to take charge of these areas and develop them. Angus is looking forward to 'improving amenities and improving services, both for external and internal users.

He admits that the College is 'not in a strong financial position as things stand today'. and he sees one of his main tasks as 'improving the underlying financial position of the college. We balance our books, but in balancing them we are usually obliged

to make certain sacrifices from year to year and we don't spend as much as we want or ought to spend on things that matter: buildings or student accommodation. You can't go on doing that indefinitely.'

He added that 'while on the face of it we appear to be balancing our books, we need to make it clear to those who are in a position to fund universities that it is at a cost.' He stressed that the College must 'ensure that where it is spending money it is getting the best possible value for money.' 'That goes back to how we control our expenditure,' he said.

He explained that there were several ways in which he was hoping to improve the College finances: 'We can generate income from the services and amenities side and through the use of college facilities by institutions and companies. We can realise the value of a number of assets that we perhaps do not use as effectively or efficiently as we might, by disposing of them or letting them out. Then we can raise funds externally from those people who have funds available for endowment or sponsorship for individual projects or indeed general endowment. Obviously the less strings that are attached, the better from our point.'

He agreed that College had probably employed him because his experience would help him to put the College on a better footing. 'Closely allied to that is that the environment in which we are increasingly having to work is becoming more competitive. That is both a function of government policy, where we are being required in the future to bid for students in a commercial way, and also because it is an increasingly competitive environment anyway. We need to

compete in the way that we do our business as a whole, the way we offer the service that we do. This covers everything from the kind of accommodation we offer the students to attract them, to every area we are involved in. That's the kind of environment I am well acquainted with; I think it's relevant and becoming increasingly so.'

Describing what had attracted him to Imperial, he explained that since January last year, he had 'had some involvement with a company which was originally sprung out of the Mech Eng department. So I wasn't completely ignorant of the college by any means. When the opportunity came up, and having decided to change course and do something completely new, this seemed to fit the bill in an unexpectedly interesting and exciting way.'

He acknowledged that, although the job is, on the surface, a change from his previous work, he 'hadn't felt at all like a fish out of water: the issues are all so familiar. The thing which is different is the way in which the College runs itself. Talking about how the move fitted in with his overall career pattern, he said, 'I've always felt one only gets very few opportunities in a career and if you add up the opportunities to change course and do something new and exciting it's a handful, if you're lucky. I can count the ones I've had on one hand. When they come up, they come up in a totally unexpected way and they hit you as opportunities. This one hit me as a real opportunity to change course and it was attractive on that account.'

With a gap of almost eighteen months between his previous job and his employment in College, he explained that 'having been abroad so much I hadn't got all that much exposure to opportunities in the UK. I recognised that I needed some time to look at opportunities and to meet a lot of people, so I spent the initial period going round meeting a lot of people and finding out what was going on. I also built up a number of interests as a self-employed director and consultant. Over half of that time I was 110 percent overemployed working on various company accounts, such as the company with connections with the Mech Eng department. It was a very enjoyable and interesting 18 months if a little uncertain.' He is still involved with several of the companies but has 'given up half of my outside involvements. There weren't enough hours in the night to do the full job and do all that one could expect to do on my other interests.'

He described one of his main areas of preoccupation: 'getting value for money where we spend it. Part of that is about control of systems so that we don't make mistakes in the way we operate and people don't have to do things three times: they can do them once and get it right.' Another area which he feels is important 'is that, having achieved excellence and having as good a reputation as we have in academic terms for teaching and research, the maintenance and enhancement of that reputation will become increasingly dependant upon every other aspect of the institution working to the same kind of high standards.'

He pointed out that, 'there are areas which work well outside the academic area and there are areas which do not work as well as they should or could. That isn't on account of a lack of will or concern, because I think there's a great deal of commitment, but because the way we are currently split up in

certain areas isn't facilitating the achievement of the levels of service we need and which I think we could offer.'

He also felt that 'there is a need on the administrative side to create a good career structure for people. Then we can maintain and retain talented people, who are committed and well motivated to support the administrative and auxiliary functions and services of college. I attach a great deal of importance to that.'

'In terms of issues,' he remarked, 'accommodation is a major one. It isn't only in terms of the number of beds, but the quality and standard of the accommodation: that is a preoccupation of the first order. Then there's the question of the improvement of the infrastructure. I don't just mean in terms of maintenance but also appearance. I think we need to look at ways in which to create a more sparkling image of the excellent work that goes on here. You could be mistaken, as you walk past here, that it isn't the kind of institution it is. Apart from making it a better place to work as a student or academic or staff member, it will also help us to promote the institution to prospective fundgivers.'

During the interview, he frequently mentioned 'value for money'. Questioned on the impression the students had been given that he had been heavily involved in delaying the plans for an astroturf pitch at Harlington, he said 'I would hate anyone to think I'd blocked it for the sake of it. The concern which I had, which was shared by others, was that it was a substantial figure and probably more than people had been given to expect. I was also aware of other proposals for hockey astroturf through my involvement as the governor of a school in Kent, and it seemed quite a large figure. There wasn't any evidence that I saw at that time of a full appraisal of the tender in response to a clear specification. That

is now an aspect that is being looked into.'

He added that he 'entirely endorsed the idea of there being a hockey pitch. I also recognise the fact that time has been sliding away and there is a problem about pitches for next season: we need to get on with it. But we need to be sure in so doing that we are getting the best possible value for the money we have got.' Speaking of the Harlington Gravel Trust Fund, which is funding the astroturf proposal, he said it was 'a wonderful source of funds, but simply because it's coming out of the ground in the literal sense doesn't mean one shouldn't go through the same forms of appraisal that one would if one was putting up a building in College with money obtained in a more conventional way.'

Questioned about the difficult position that the Harlington Trustees have been placed in since the Rector, Sir Eric Ash, announced, above their heads, that he would like to use some of the fund to finance a new hall of residence, he commented, 'we are in the process of clarifying their position. My interpretation of earlier governing Body minutes was there was an understanding that the fund would be applied 'for the benefit of students'. What that means is something which we need to have defined more clearly for the benefit of all.'

He observed that 'we know we've got a crying need for improved accommodation for the students. We've also got a clear requirement for improved sporting facilities. I don't think the two are mutually exclusive. I hope that we will reflect the importance of the non-sporting side as well as sports, because I think that that is something which matters to a lot of students, not only the sporting ones.'

He has also launched investigations into how every part of the College functions. He said, 'a part of that is to enable me to get an understanding into how people in the departments believe they ought to be

run in the future, as well as to enable us all to see what are the strengths and weaknesses of the way we run currently. I don't think it should be seen as a particularly targeted thing but as a general review which is going on across the board.'

Potential reorganisation of the College conjures up the possibility that staffing levels may be changed. Speaking on the current problems with the Manufacturing, Science and Finance (MSF) Union, he said, 'we are not in official dispute. The situation is an unfortunate one, which wasn't triggered by any action on our part: the company to whom these people were seconded decided for its own reasons to undergo retraction. We had to act accordingly and hopefully will have done so in the best interests of all concerned. I've always been reasonably optimistic that, having put in a lot of effort, as we have ever since we were first advised of the decision of the company, we can sort it out.'

In a general context, he said, 'I don't envisage major conflicts at every turn as a consequence of what we might need to do to improve the way we operate. There aren't any plans at this time to provoke great problems all over the site.'

Angus Fraser is appointed directly by the College's Governing Body, of which he is a member, but is responsible to the Rector. He said that he didn't see any conflict between the Rector's remit as 'managing director of the academic side' and his own as managing director of the administrative side. He described the Rector as being the 'chief executive' of the College. 'The lines between the academic and administrative sides aren't always crystal clear. There are people involved on both sides in many committees. I'm not aware of any fundamental reasons why the present structure shouldn't continue to work perfectly as well as it has in the past.'

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All contributions to be in during the first week of next term, or you won't be included!

Richard Heap explains the world of paper recycling. Printed on 100% recycled paper.

Paper chasing

56% of all fibres used in the UK's paper production are reclaimed, putting us fourth in the world. So what's the fuss? Of the nine million tonnes of paper we consume every year, less than half is made here, the rest is imported. This makes our record somewhat less impressive, putting us below the global average.

Everyone must become involved, at home and at work, if Chris Patten's statement to recycle 50% of domestic waste in the next decade is to become a reality.

But why should we recycle? 'The benefits of recycling are obvious; rarely do environmental and economic factors so unambiguously support the same goal.'—(Fourth Report, Trade & Industry Committee 1984 Wealth of Waste.) Economically it is essential. Paper imports, at £3.2 billion per annum are the fourth biggest contributors to the trade and deficit figures. Added to this is the increasing cost of landfilling waste. Each one of us will pay for this through Poll Tax, interest rates and inflation.

'The government may say that recycling must be economically viable, but it is questionable whether our present way of living is viable in the long run without very much more recycling. Perhaps the government should extend its profit and loss accounting to cover the loss to future generations as well as our own. It is an ecological truth, as well as an economic one, that there is no such thing as a free lunch.' (*Sunday Telegraph* 9.3.86.)

Predictions for the next ten years, show a pulp shortage in the West. This, combined with our need to cut imports to the UK, has led to plans for new mills and plantations. Afforestation plans include areas such as the Flow Country in Caithness. The only Peat

Bog of its kind, it is home to many rare species, but over 50% of it is under threat. Similar problems are occurring in the tropical regions where tree species, inappropriate to the area, are being planted, damaging the soil.

Apart from providing a source of pulp, recycling also saves energy and cuts pollution. Many people only consider the energy required for processing materials and do not account for the collection of raw materials and the safe disposal of the product after it has been used. Recycling, generally, saves at all these stages.

Office collections, such as the scheme established at Imperial, where the staff segregate their white quality waste paper from the general refuse, are essential for further paper recycling. Although some sorting of the collected paper is inevitable, it is ideal for making printing and writing papers. Despite this, 95% will go into non-recoverable tissues. High prices of recycled printing papers, due to the small scale of production has dampened demand. But demanding recycled printing paper without increasing the supply of high grade waste will only push up the price of recycled pulp. At present, the tissue industry absorbs any over-supply of white office waste. This will remain so, until more incentive is given for mills to produce high grade recycled paper.

'Barring legislation, extra recycling of high quality waste is only likely to come about due to increase in prices of virgin pulp, or significantly increased collection of sorted paper from offices.' Tom Mockridge—*Market Barriers to Paper Recycling* Friends of the Earth 1990.

Caution should also be given here as several of the new recycled papers coming out use preconsumer mill

waste and so technically may not be called recycled. No standards exist, as yet, to define what exactly constitutes recycled paper.

In 1981 the EEC passed a Council Recommendation that member states should define and implement policies to encourage paper recycling, and encourage products which do not preclude subsequent recycling. The response has been poor, although in 1984 Denmark passed a voluntary Act prohibiting materials which prevent the recycling of paper and board.

So what can we do? Until office recycling schemes become more widespread, the demand must be put on papers (tissues, printing and packaging) made from lower grade waste (newspaper etc). This means using photocopier papers such as Recyconomic and Fortuna, which perform well but are aesthetically different, and brown toilet paper. Criticism of these papers comes from experience of older lower quality recycled papers. These woody papers are much cheaper than virgin pulp papers, but are difficult to buy in the UK, as virtually all the mills here use higher wood-free waste grades. Many stationery suppliers can offer these papers, but the two addresses below specialise in them:

Traidcraft (recycled paper catalogue)

Kingsway, Gateshead NE11 0NE.

Tel (091) 487 3191.

Paperback

Bow Triangle, Business Centre,

Unit 2 Eleanor Street,

London E3 4NP.

Tel: 01-980 2233.

TREES

Six species of tree are commonly used in paper making: pine, spruce, fir, birch, eucalyptus and poplar. Conifers make up the largest proportion, coming from North America and Scandinavia. The hardwoods come from the tropics, Spain and South America.

Virtually all the trees are grown on sustainable plantations where replanting often exceeds felling. Good as it sounds new plantations are needed to meet the increasing demand for pulp. Unfortunately, as monocultures they are poor habitats for wildlife. Many of the new plantations will cover rare habitats, or land unsuitable for intensive forestry.

PROCESSING

Requires a large energy input, and is a major source of pollution. There are three main pulping processes:

- **Mechanical (woody)**—produced by grinding, gives a high percentage yield, although it produces a low grade paper as some fibres are still bound together by the lignin.
- **Chemical (wood free)**—uses acid/alkaline solutions to dissolve the lignin which holds the fibres together. The yield is less than 50% but the paper produced is of higher quality and does not yellow with age, as with mechanical grades.
- **Chemo-mechanical**—uses more dilute chemical solutions combined with grinding. The yield is higher but not all the lignin is removed.

Methods are being developed to increase the yield by using more of each tree.

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MILLS

In the mill, paper quality is determined by using fibres from different trees. In general, the longer coniferous wood fibres are used for strength, while deciduous fibres add bulk. To increase binding, the pulp is put through a beater, which frays the ends of the fibres. This shortens them, which is why it is impossible to recycle paper indefinitely.

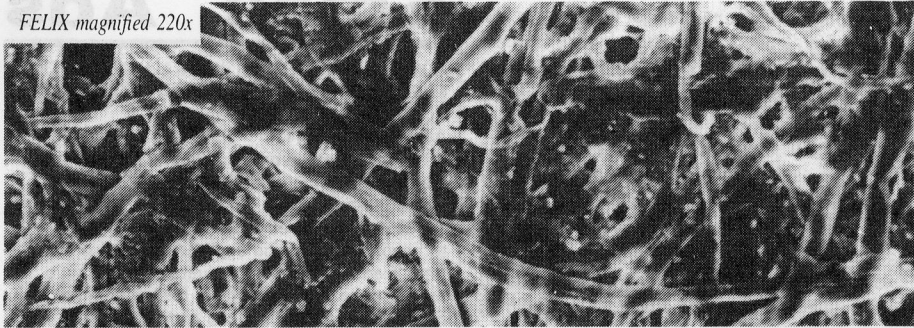
China clay is then added to increase opacity. After being laid out on a former the paper runs through up to 50 drying rollers at a speed of 200m/min, leaving it with a moisture content of 3%.

PRODUCTION FIGURES

Worldwide, 29% of paper and board is made from waste material. In the UK the figure is slightly lower. The packaging industry, the biggest consumer, uses 85% reclaimed fibres. Printing and writing papers make up the biggest market, but use only 5% recycled material. Recovery of this grade is much higher, but the fibres are then used in producing lower grade paper.

Not all paper is made from wood fibres. Plans are being made to build a mill using straw as a fibre source. Although a more expensive process is needed, the raw materials are cheap because of the ban on stubble burning. If it goes ahead this will ease the pressure of increased afforestation, but could make the recycling process more complicated.

FELIX magnified 220x



COLLECTION

Not all types of paper are worth collecting—for example, a recent 75% drop in the price of newspaper has made it uneconomical for most merchants. At the same time, increased demand for recycled paper has raised the value of the higher grade waste. Waste paper prices are also dependent on the amount of print and coatings on it, as these have to be removed during reprocessing.

Before being sold to the mills, primary processing is done by paper merchants, who sort and bail the paper. Most mills employ their own merchants, but will also buy from independent merchants whose biggest markets are Europe and India.

SORTING

The paper industry classifies waste paper into 66 different grades. Generally speaking, paper grades affect the recycling process according to the rule 'what goes in, comes out'—ie high grade recycled paper can only be obtained from high grade waste. Sorting waste into the correct grades is very important, contamination of the wrong grade or plastics and glue will disfigure the final product and can even break the paper web, stopping production for several hours. Sorting of paper by mills or merchants is uneconomical; correct segregation at

source is therefore essential. This relies on educating people and raising their awareness of recycling.

THE RECYCLING MILL

A combination of steam and grinding are used to repulp paper. Depending on the final product and the quality of the paper put in, deinking processes may be used, although worldwide this is done on only 16% of the paper reclaimed. Chemicals are added to either disperse contaminants or coagulate them, which then settle out or are filtered off by a series of strainers. Bleaches can be used, but their effluent is highly toxic, so to give the product its desired degree of whiteness, different grades of waste paper are used. Unfortunately, until we change our attitude towards brown recycled toilet paper, high grade paper will be wasted simply to make white tissues.

WASTE & LANDFILL

Greater London alone produces 12 million tonnes of commercial waste per year. Imperial itself produces approximately 1,000 tonnes per annum. About 30% is paper and board, of which 100 tonnes is high grade, white paper. The total cost of disposal is nearly £40 per tonne. As landfill sites around London fill up alternative disposal methods will become essential. As much as 60% of this waste could be recycled!

Grapevine

'Real sherry comes only from Spain' and on Tuesday we were treated to part of the £1 million campaign to promote this fact. In an attempt to reach Imperial College students, Brian and Jenny Buckingham, of the Sherry Institute of Spain, tutored us through a range of seven very different wines.

The word 'sherry' is the English misconception of 'Sherish', the Moorish name of the Jerez region of Spain. All real sherry is made from the Palomino grape grown in this area. During fermentation, two distinct wines evolve: fino and oloroso. Flor, a natural yeast, distinguishes the two; it grows naturally on fino and is not present on oloroso. While maturing in casks made only of American white oak, the flor imparts a musty, yeasty flavour to the fino and protects it from oxidation, preserving and enhancing its fine, delicate flavours. Meanwhile, the oloroso darkens and develops into a deep and rich wine. These two form the basis for all other sherries: creams, amontillados, cortados, and manzanillas.

The sherries we tasted ranged in sweetness from bone dry to syrupy sweet. We started with a light golden-coloured wine from San Patricio which was the essence of a fino: so dry and yeasty and yet with remarkable honey and apple overtones. The second wine was tasted as one of the evening's favourites. It was an incredibly aromatic old amontillado from Harvey's with rich, nutty, toffee-ish, leathery flavours and a perfect salty-dry finish. The other favourite was an amazing oloroso, the Royal Corregidor from Sandeman. This wine had a coffee-brown-green colour and burst with cough medicine, figs and clove

flavours.

We were told it was quite possible that the Romans first brought sherry to England. Most certainly, it was well engrained in our society by the time of Chaucer. Despite this long and noble association with the English palate, most of us dismiss sherry as part of Granny's Christmas ritual. This is the image the Sherry Institute is confronting in its re-education programme. We were left with the impression of a thriving, multi-million pound industry, firmly rooted in a region rich with tradition and good living.

We hope to see you at our forthcoming events:

- Tuesday 13 March—White Bordeaux by Dave Rowe, Hon Pres, Editor of 'Decanter'.
- Wednesday 14 March—Coffee Tasting by Mary Banks, London Coffee Information Centre.
- Tuesday 20 March—Alsace Wines by Russell and McIver.
- Wednesday 21 March—Booze Cruise Shopping Spree to Boulogne.
- Tuesday 1 May—Austrian Wines by the Austrian Wine Information Centre.

Don't miss our special offer in the Bookshop: greatly reduced wine guide which include a discount on society events.

Salud!

P.S. All tastings held at 6pm in the Union Senior Common Room. Contact Kevin McKoen on extension 6851 for further information.

Rag

There is one last big Rag event this term: the Around the City Pub Crawl/Treasurehunt. This is a new event and is being organised by MENCAP on Wednesday March 14. The format will be that teams of 3-6, preferably in fancy dress, register in the JCR between 12.30 and 1.30pm, are given a clue list of several pubs in the City and a collecting can each. The aim is to find all your designated pubs in the right order and try and collect as much money along the way.

As with Monopoly extra points will be given for interesting items brought back and MENCAP are providing several prizes—it should be a fun day for all so please turn up and drag a few friends along.

Other than that, there is a Rag Raid to Cambridge on Saturday March 17 and to Guildford on Wednesday March 21. For more information on these events please turn up to the Rag meeting today in the Union Lounge at 12.30. Finally just an advanced warning of the only Rag event that happens next term: Rag Fête on May 12, complete with chocolate mouse wrestling, dwarf throwing and 'where will the animal dump?'. If clubs or societies would like to do anything for it, could they please see Fiona Nicholas in the Union Office.

Bass Dance

Bass Dance, one of England's top reggae bands come to the Union Lounge tonight. Fronted by Basil Gabbidon, a former member of *Steel Pulse*, Brum's favourite reggae stars are here for a night of sweet rootsy rocking. More commercial than *Steel Pulse*, they still keep an innovative streak, resisting the tempting slide towards UB40-ism, and the softening of reggae's essential roughness.

Combining the classic hard edged beats with their own more radical approach, using a selection of synthed and sampled sounds, *Bass Dance* provide music with raw energy. One minute playing dance pop songs like *Starlight* and the next there is steaming rock guitar solos and African rhythm.

So come and enjoy yourself tonight. Be lifted by the music, put a smile on your face and get skankin'.

Doors open at 8pm, with *Red Ten* as the fine support act, on stage at 9.30-ish. The bar and disco run until late, with DJ Gwynmuffin kicking out his usual freewheeling mix of the steamiest on vinyl. Tickets are £2 in advance or £1 with Ents cards, from the Union Office.

Rufus Isaacs, Ents Publicity.

Anti-Poll Tax

IC Autonomous Anti-Poll Tax Group will be holding its first meeting above Southside Bar, 1pm, Tuesday March 13, to discuss how to organise and fight this unfair, extortionate and intrusive tax. Every day opposition to it grows, even from the Tory ranks! All welcome.

FilmSoc

This coming Thursday sees a highlight of the FilmSoc calendar, with a showing of *Sex, Lies & Videotape*. One of the surprise hits of last year, this controversial, award-winning film focuses on the sexual hang-ups of four people living in steamy Baton-Rouge.



Staff Protocol

Neil McCluskey has implied that he may wish to introduce a staff protocol into IC Union. His mind is clearly at odds with the realities of Imperial College. He says that other student unions have a staff protocol. The University of London Union has such a rule, which states that no discussion of permanent staff may take place. There is a good reason for this; the law. ULU is not the legal employer of its permanent staff, the University is. This means that, since the student union does not employ its staff it cannot pass comment upon them. This is not the case at Imperial College. The Union employs its own permanent staff at IC. For Neil to be able to implement a scheme like the one at ULU he would have to give up his status in law as the employer of the permanent staff.

The reason Mr McCluskey wishes to produce such a staff protocol, is to prevent FELIX reporting on the Union's permanent staff. If FELIX is prevented from reporting on these staff, what right can we lay claim to when reporting on College staff and their actions? Neil's suggestion is just a vain attempt to gag FELIX. Sometimes I wish that the people who wished they were FELIX Editor would stand for the post in the first place.

The NALGO members

The Union Office staff have now laid themselves open to comment by sending a statement to the UGM. Fair enough, they wanted somewhere to voice their feelings. What was a little more interesting was the dealings behind the scenes. Having placed a copy of the statement in the Student Television Of Imperial College (STOIC) pigeonhole, Jen Hardy-Smith saw fit

to ring them to make sure they got it. This is a clear sign of Ms Hardy-Smith trying to get her oar in where it is not needed. STOIC collected the message and binned it. The unheaded paper contained an unsigned statement made on several people's behalf—it was an unstatement, it was no more. This comes in the same week as Ms Hardy-Smith's equally childish wingeing about the franking machine in the Union Office. I will not comment upon this since there is a letter in FELIX this week. What I will say is that I am sick of hearing that FELIX staff have been intimidated whenever they visit the union office. Ms Hardy-Smith ought to know better.

Sorry

Sorry to the Chem Eng first years, who we implied were the cause of the trouble at the Chem Eng Soc dinner. The first year did not cause the trouble, they were given a lecture asking them not to aspire to their fourth year counterparts.

Next Issue

There will not be a FELIX next Friday. We will be a bumper Easter FELIX on Wednesday 21 March.

Credits

Many thanks to Richard Eyers, Jeremy Burnell and Liz Warren for helping on the results fly-sheet. Thanks to last weeks collators, Jim Lucy, Tom Monk, USS Fartnoise, Hippo Claybrain, Dr Coconut, Sunny Ghaie, Jeremy Burnell, Matthew Shovelton, Mark Wilde and Richard Eyers. Thanks this week to **Rose Atkins** and **Andy Thompson**, Liz Warren, Simon Haslam, Toby Jones, Adam Tinworth, Adrain Pagan, Ian Hodge, Liz Rickwood, Del, Sarah, Sumit, Richard Eyers, Jeremy Burnell, Chris Adams, Roland Flowerdew, Matthew Johnson, Richard Heap, and all the clubs and societies who contributed. Sorry to anybody who did not get an article or box-ad in, space was tight.

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: Jeremy Burnell. Advertising Manager: Chris Adams. Copyright FELIX 1990. ISSN 1040-0711

Competition

STA have generously donated a £100 travel voucher for use on any travel costs booked through them. A weekend away or travel abroad could be yours with this prize. The competition is in three parts, with each section becoming progressively more difficult. This week's questions are:

What was Tanzania formerly known as?

What was Zimbabwe formerly known as?

What was Sri Lanka formerly known as?

KEEP YOUR ENTRIES. DO NOT HAND IN ANYTHING YET. THERE WILL BE ONE MORE SET OF QUESTIONS IN THE LAST ISSUE OF TERM (WEDNESDAY 21ST MARCH). ALL QUESTIONS WILL BE REPRINTED AT THE END OF THE COMPETITION.

LEARN TO FLY!

with
IC Gliding Club

Arrange your first flight with
the Gliding Club:
Air Experience Weekend
17-18 March

Come to Aero 266, 1pm, Thursday
March 15, to book a place

Vacancy WARDENSHIP MONTPELIER HALL

The Wardenship of Montpelier Hall falls vacant with effect from 1 May 1990. The post is open to all members of the College.

Wardens receive rent free accommodation in return for pastoral duties within their residence.

For further information and an application form contact Alan Mellor, ext 3307, room 507 Sherfield Building.

Closing date for applications is March 21.

Small Ads

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

ANNOUNCEMENTS

- **Postgraduate women:** Lunch 12.30pm Friday March 16th. Green Committee Room, 3rd Floor Union Building.
- **Subwarden** Weeks Hall: This position is shortly to become vacant and applications are invited from grant funded postgraduate students who expect to be at College for a further two years. The starting date is the end of term/Easter vacation closing date 12/3/90. Please apply by letter and CV to Dr S.P. Walker, Warden.
- **Cycling Club** training: Now also Saturdays.
- **IC Autonomous** Anti-Poll Tax Group meeting on Tuesday 13 March, 1pm, above Southside Bar, Prince's Gardens. All welcome: We can defeat it.
- **Lost Theatre** present: 'Lark Rise to Candleford' Flora Thomson's trilogy brought to life in an adaptation by Keith Dewhurst. Fri and Sat 7.30pm. Fulham Road, SW6 (381 6151).
- **Cheap** haircuts on Monday mornings only at Nino's hairdressers next to Tui's (the Thai Restaurant) at South Ken. £10 for students (normally £15). Nino's 38 Thurloe Place, South Ken 589 1054.
- **Keep Fit** AGM: 6.30pm. Voting for next year's committee and free cheese, wine, etc for members. Southside Lounge.
- **Jewish Society** will be showing a remarkable film called 'The Wave' next Tuesday, March 13, at 1.30pm in the UDH (1st floor Union Building). Contact A Preston (Maths 1).
- **Siemens** Studentenkreis—Could everybody in the Siemens Huderntenbrein please contact Anette Oels through the Mech Eng 3 pigeonholes or ring 584 0841.
- **High** flyers required. Interested in joining/forming IC Flying Club. Contact Aris DoC 2.
- **Mech Eng** Revue: Thursday 15 March, 7.30pm. Drop in for a laugh. Price £1.00

FOR SALE

- **Ladies** size 14 Arctic pro semi-dry suit for scuba diving. As new! Excellent value at only £70 ono. Contact Roz on 370 1417.

LOST

- **Lost**—A white plastic bag containing Malaysian traditional clothes. Last seen Malaysian Soc noticeboard. Any information on its whereabouts contact M Reza Ibrahim on Aero 2 or phone 402 7460. There is a cash reward.

PERSONAL

- **Carol** says: If I lie underneath you, I can keep it down flat.
- **IT:** Wednesday 21st March
- **IT:** Skip the Gold Blend foreplay and go straight for the main course.
- **IT:** The IC Swimming & Water Polo Club Annual Dinner—members and guests invited.
- **To the** Crunchie licking girl in the JCR! Who are you? From your valentine.
- **My warriors** will turn your so-called 'fabulous' freebirds (+AE) to PASTA! Theodore T Long.
- **Good looking** fresher seeks plastic reflectors from cornflake packets for bike wheels. Apply D Bevan, Maths 1.
- **Mega** thanks to Andy, Sunny, Adrian, Jeanie, Jeremy, Toby, Steve, Pippa, Sez, Lesley & Alan, Parry, Richard, Jo, Kate, Andy & Rose, and medical students everywhere. Cheers—Shan.

City & Guilds INTERDEPARTMENTAL COMPETITION Darts & Pool

Tuesday 20 March
6pm in Elec Eng Common Room
Teams of 4 per department
Come along and support your department!

Welfare reply

Dear Dave,

I am writing to you regarding Dylan James's letter which appeared two weeks ago in FELIX (issue 860, February 23) on the subject of the Poll Tax.

Whilst I am pleased that students are reading the articles and handouts I produce, I am also concerned that some, like Mr James, are still confused about exactly what the Poll Tax will mean for them. I am also concerned that Mr James has misused information available in the Welfare Office to suit his argument.

I therefore feel it is essential that the following points are made:

1. I have *never* stated 'that the typical student pays £5.25 in rates on £50.00 rent per week'. The source of this piece of misinformation I assume came from my handout on Housing Benefits in which I used an example to show how Housing Benefit is worked out. In this example the rent was given as £50.00 of which £5.25 per week is rates. The words 'typical student' do not appear in this handout. In fact in my experience many students at present pay more than £50.00 per week inclusive rent.

2. Mr James has correctly calculated that £5.25 per week paid during the academic year comes to £199.50. This is clearly a lot more than the student Poll Tax bill for L.B. Westminster—£39.00 or R.B. Kensington & Chelsea—£75.00. However he has overlooked three very important factors:

- Many students are going to find it difficult to get landlords to reduce rents from 1.4.90 (I shall expand a little on this in point 3).

- The 1988 Housing Act has meant that the majority of students now have Assured Shorthold Tenancies for which the landlord can charge a 'market rent'. So even if the landlord reduces the rent from April he will be able to increase it again when the tenancy ends. So for example, a student paying £50.00 per week including rates could well be paying £50.00 and above per week excluding rates in his next accommodation.

- I agree that L.B. Westminster's Poll Tax for students is low but how many students can afford Westminster's rents? A large number of students only get one year in an IC hall of residence where the cost is comparatively low compared with private sector rents and allowing for possible travelling expenses. During next term 1st and 2nd year students will be hunting for the cheapest suitable accommodation they can find because student loans are coming in and Housing Benefit is going. This cheaper accommodation is likely to be in higher Poll Tax areas. Do I hear 'swings and roundabouts'?

3. Mr James also argues that ICU should be telling students how to use the law in order to get landlords to reduce their rents from 1.4.90. However there is no provision in the Community Charge Regulations that require landlords to reduce rents. In Scotland landlords have taken advantage of this and many

tenants have lost out as a result. Other existing legislation can help tenants to reduce rents but the process has many pitfalls. Anyone who wants to pursue this should seek advice. Also it is important to remember that the reduction will only apply up to the end of the current tenancy.

4. Finally Mr James along with all other students should remember that they will not be students forever. Final year students will become liable for the full Poll Tax when they leave College at the end of June.

So do students gain from the Poll Tax? I will leave that question to individual students to answer for themselves. If anyone would like any further information and advice the Welfare Office is open for: 'typical students' and others from 12.30-5.30pm Monday to Friday.

Yours,

Yve Posner, ICU Welfare Adviser.

P.S. In case anyone is still wondering—yes, I am anti-poll tax. However as a Welfare Adviser I do not advise students to break the law. Anyone who wants to resist the Poll Tax should join their local anti-Poll Tax group.

P.P.S. The next time someone rips my posters off a display board I won't be responsible for their welfare!

Thanks Mrs T

Dear Dave,

From the man who brought you 'Jesus voted Tory' we now have the assertion that students will actually gain from the Poll Tax. Mr James has struck again.

I don't know how accurate the figure of £5.25 rates a week for the average student, but I pay something more like £1.25 a week in rates in a £45 bill. Now I must admit that I do live in Westminster, so my £39 a year would seem at first sight a good deal. But it must be remembered that Westminster is a seat the Conservatives are in grave danger of losing at the next election. So whoever wins the seat, I think we can look forward to this £39 not staying so low.

'How can anyone complain that students are losing out?' asks Mr James. This is how—as from April this year there will be no Housing Benefit, so this means at least £20 a week down the drain for a good number of students. And does anybody seriously believe that more than a handful of landlords will actually decrease their rents because they do not have to pay rates? I would suggest that with housing becoming even more difficult to find, rents will actually rise.

Let's all thank Mrs T for...um, er...yes.

John Mitchell, Maths 2.

Taking the Ritz

Dear Dave,

Thank you for expressing an interest in ordering 'several thousand' Vote Ritsperis stickers (FELIX 863). I am pleased to inform you that, since the costs of pasting-up a master sheet was paid for by Mr Ritsperis. I can now offer you stickers at a 17.5% discount (i.e. £10.42 per 1000 that you order).

I look forward to hearing from you.

Andrew Lewis, Mech Eng 2.

More Harlington

Dear Dave,

After all the recent publicity concerning Harlington and the Gravel Fund, I feel it is time to explain the position of the Hockey Club—undoubtedly the most affected by the works.

I was not at Imperial when the gravel extraction started, but I am led to understand that the hockey pitches were some of the best around at the time. Indeed, when I arrived there were three very good grass pitches. This was for three IC teams and three CCU teams. The deal with Streeters, the gravel contractors, was that a substantial area of the Harlington grounds be relaid for the start of this season. This was despite representation from the ACC, and even the groundsmen saying to the contrary. It was mid-August when, surprise, surprise, the people in charge of the relaying cottoned on to the fact that what they had produced, was not a smooth surface suitable for student sport, but a cabbage patch, and a very poor cabbage patch at that. So, at this time, six weeks before the start of term, the Hockey Club was told that we had only one pitch, and that we would have to find alternative grounds. For anyone that doesn't know, six weeks is not very long to find pitches to play three or four matches on every Wednesday and Saturday. Luckily we booked some and so this season we have managed, however for next season, we have made no bookings, foolishly believing that finally we were going to receive our own astroturf. Demand for artificial pitches is huge, and at present, we have not been able to get bookings, even on the pitches we are currently using.

So, the situation we have is this: there will be one pitch at Harlington, little or no astroturf bookings, and up to six teams to play at once. This will have far reaching consequences for the Hockey Club. The ladies have just been elected to a Saturday league, after a long struggle for recognition, and without home pitches they face the very real possibility of expulsion without having played a match. During UAU fixtures five teams play at home on the same day, and without facilities the same fate may face us in this competition, all this after such success at getting a team to the semi-final.

The success and expansion of the Club in the last three years seems set to be dramatically reversed if the astroturf pitch is not laid this summer. We all feel that College is right in saying that £475,000 is too much to pay for one pitch, but if they had set about specifying realistic requirements for this pitch (the two pitches in Battersea Park, which are excellent cost less than £½ million together), then this current delay would not have occurred, and the Hockey Club would be looking forward to further expansion and success in the future. As it looks at the moment, many of the members will have to play for other clubs, or simply discontinue playing altogether. This would be a great shame for hockey and athletics at Imperial, and I ask the powers that be to consider this plight we are faced with when they decide to, or not to proceed with, the astroturf pitch.

Yours sincerely,

Colin Wright, Hockey Club Captain.

More Asiansoc

Dear Dave,

I suppose the letter concerning Asian Soc in last week's FELIX asks for a response. Just so that you don't have to dig out the issue, this is what Anil Loadwa wrote about Asian Society:

'(...)Firstly the only reason Bhartendu set up an Asian Soc was because he knew no one would have elected him as President for Indian Soc. It was an ego trip. The setting up was helped by 'contacts' eg former India Soc president Kob and his dear friend Wouter (OSC Chairman) who pushed the motion through the Union. (...)'

I would like to reply to Mr Loadwa's letter with these comments:

If someone has the enthusiasm and ability to set up a new society and manages to collect 135 signatures, why should anyone object to the formation of this new society?

Yours sincerely,

Wouter van Hulst, Overseas Students Officer.

Sorry

Dear Dave,

We were most concerned with the implication in your article 'Chem Eng in disgrace' that the first year were to blame for the disgraceful behaviour at the formal departmental dinner.

Twenty-four out of seventy-five first years went to the dinner, none of whom embarrassed the department. (In fact, most of the trouble was confined to fourth years, postgraduates and academic staff.) Also the clean-up bill was not the sensational £5,000 but actually £100.

We would also like to take this opportunity to say how disappointed we are that the lecturers felt that it was necessary to admonish us for the behaviour of others. Although they may have been trying to ensure that these scenes are not repeated in future years, the conduct of the first year at the dinner showed that reprimand was unnecessary.

We do not condone what happened that evening but were concerned about the reputation of the First Year Chem Eng who will have to attend further formal dinners.

Yours sincerely,

A J Marsh, S Brownina, G Marks, P Caldwell Dugald Agble, Z Alam.

'Toon tribute

Dear Dave,

I am writing to FELIX for the first time to express my thanks to you and several members of the FELIX team for the support that you have given me throughout my campaign for the Deputy President's post.

I am especially grateful to Jeremy Burnell and Andy Thompson, for the efforts put into helping me produce the poster, which my friends still reckon suffered from the fact that I was in it, and to yourself for the long hours and late nights.

Let it now be recorded in the annals of ICU History that I am the first candidate ever to be defeated by a 'toon. One astute member of the electorate asked me who I most admired in the world. Well, put aside the politicians, movie stars, businessmen and sex kittens, I can only be in awe of Jessica R., and I wish her all the best for the future.

Yours sincerely,

Benjamin Turner.

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Squashed!

Dear Dave,

A funny thing happened to me last week. I was told that the Sports Centre was in dire financial straits and therefore the Union Squash Club time would have to be rather drastically reduced. These changes were rushed through a meeting of the South Ken Sports Committee and are being implemented this week.

Now the funny thing about this is that I'm captain of the Squash Club, and I wasn't informed of these changes until after the events had taken place. No discussion, just a decree from the College authorities. The changes are fairly extensive, probably won't work and are going to cause one hell of a pain in the arse to me as I try to explain to my members this lightning decision. Sports Centre staff are as equally doubtful as me on the mechanics of the scheme.

The decision is quite indicative of the College authorities' poor relations and communications with the student body. No careers service, earmarking of Harlington Trust funds for a hall of residence, whatever next, sale of the Union? or perhaps a knighthood for the Rector.

Craig Robinson, Captain Squash Club.

Bigotry

Dear Dave,

It has come to my attention that there is a case of discrimination in this College. This may not be a surprise to the majority of the students in College but the nature of it will shock many.

As a first year I am about to start on the futile search for a room for next year that will not send me heavily into the red and is less than fifty miles away, stupid I know.

'Why don't you try for a re-app?', impossible as unlike most of the people who do get rooms as re-apps I spend some of my time working, not down the pub plying the sub-wardens with drinks.

During my vain efforts to find somewhere that even closely meets my needs I discovered an oasis in the desert. Just as I feel that I have a small chance of getting a place it is snatched away from me in a cruel vindictive way.

The place in question is a basement flat in Fisher Hall. These flats have room for five or six people but they are NOT reserved for re-apps from Fisher Hall. As far as I am aware, please correct me if I am wrong, they should thus be made equally accessible to all students without preference towards Fisher Hall residents.

Upon inquiring further I find that all the students in the flats, almost without exception are indeed ex-Fisher Hall residents and that the only way of getting a flat is to have 'friends' in the hall such as re-apps and sub-wardens.

Without friends in the hall I would never have discovered the existence of these flats and indeed most students outside of the hall have no idea that they exist. Even the method of applying for these flats is a secret kept by a selected few. They may as well not exist for at least 90% of the student population.

It is thus my opinion that these rooms are not being made freely and impartially available to all residents as they should be.

This is thus positive discrimination towards Fisher Hall residents and as such it should be condemned. I would appreciate it if the Evelyn Gardens Superintendent would tell students if these details, which were obtained from word of mouth, are true and what he will do about it.

Yours,

Name withheld by request.

No bullshit!

Dear FELIX,

I am sure that I speak for all the candidates in the recent sabbatical elections when I extend my thanks to the FELIX staff for their help over the last few weeks.

Rose, Andy and especially Dave have all worked extremely hard to produce the elections publicity in addition to their normal workload to produce FELIX. Despite this they have remained friendly and helpful even when we bothered them with irrelevancies at awkward times. Certainly Dave has gone out of his way to ensure that each candidate has had the best publicity possible.

Thanks,

Dougie.

Hostile union

Dear Dave,

Events last Friday and Monday have made me concerned about the way some of the Union Permanent Staff present themselves to students.

On Friday I agreed to mail out the copies of FELIX which are sent to members of College's Governing Body, national newspapers and others. Because of a backlog of three weeks, there were about 300 envelopes.

Having borrowed the Union franking machine and with the help of several members of the FELIX staff, I spent about two hours franking the envelopes; they were then carried down to the post office on Exhibition Road by two of the FELIX staff. The cost of the mailing was about £60 and there was about £15 credit left on the franking machine, which I returned to the Union office at about 5pm.

Part of the job of the Union Assistant Administrator, Miss Michelle Began, is, I believe, to frank outgoing post on behalf of Union clubs, societies, etc. The unpaid and freely given efforts of the FELIX staff thus saved her several hours of tedious work. On entering the Union Office on Monday morning, I received a spate of abuse from both her and the Union Administrator, Mrs Jen Hardy-Smith.

We were accused of using up all the credit on the franking machine: is £15 not enough to do the majority, if not all, of the Union's post for one day? I know that a cheque had already been signed allowing more credit to be put on the machine as soon as necessary.

Miss Began then asserted that the FELIX Editor should take the machine to be refilled: 'He should take his turn with the other sabbaticals; he's not pulling his weight,' she said. This is outrageous given that the FELIX Editor has worked through the night twice in the past two weeks, has worked for the last three weekends (and many previous ones) and frequently works until midnight or later during the week. I am sure the other sabbaticals work very hard, but do they consistently have to work over 80 hours a week? I am certain that Miss Began does not.

Recently one of the candidates for FELIX Editor accused the Union Print Unit of being 'hostile'. I think this is a term which is far more appropriate for the Union Office. Is it just FELIX Staff, or does everyone receive the same miserable grudging reception? I hope not, but I suspect it goes a long way towards explaining the reputation ICU has for being 'unfriendly'.

Liz Warren

FELIX Features Editor

Chem Eng 4

A tale of two societies

Dear Dave,

In reply to Anil Loadwa's letter last week (FELIX 862), I feel that it is necessary to refute the allegations that he has made against myself and Asian Society and also to 'disclose a few points which I think everyone has the right to know (especially the members) about the lifestory of Asian Society'...

This brings me onto my first point. I think the reader should be aware that Anil Loadwa, Mech Eng 3 does not even exist! So, this causes even greater doubt about the authenticity of his allegations and leads me to believe that it was written by someone (or some persons) who have some sort of personal vendetta against Asian Soc. It seems both incredible and pointless to me that there are people out there who get kicks out of making accusations against Asian Soc, especially when they are totally unsound and untrue.

The 'only reason' why Asian Soc was set up was, as was clearly stated by its constitution: to promote and publicise the culture of Asia. It was not an 'ego trip' and whoever believes such has been seriously misled! The Union requires at least twenty signatures for the formation of any College society. In the case of Asian Soc, 135 signatures were presented. The people who signed the petition were informed of the reasons for setting up the society and signed because they understood and approved of the idea—not because they were forced to. The Union, on the basis of the remarkable interest shown, passed the motion for it to become a constituent society of the OSC and not because of the help of 'contacts' or my 'dear friend Wouter (OSC Chairman)' or indeed 'former India Soc president Kob'.

I am pleased to observe that Anil is a 'member of the Asian Soc' and that he joined it 'because it was meant to represent a more cultured part of Asia'. Also, he is correct in assuming that 'this is why Asian Soc was not merged with the Indian Soc'. However, what Anil incorrectly states is that 'the actual reason the two societies did not merge was because they would have had to have re-election for which Bhart was not too keen on'. The facts explain why and are as follows:

Following approval of the Society by the Union last summer, it was decided that a 'caretaker' committee be chosen to help in its running and welfare until such a time that the society would have members who would be allowed to elect in the existing or a new committee democratically (after all, there is no sense in having elections without an electorate). Following Freshers' Fair in October, the Society attracted up to

100 members. Election papers for every post including president for this year's committee (89/90) were put up on November 27 and every member of the society was informed of the exact time and place of the elections about two weeks prior to this.

The whole fiasco of a 'merger' between Asian Soc and Indian Soc was raised and discussed several times soon after the Freshers' Reception. However, not only was the 'caretaker' committee of Asian Soc against the idea but many of its members when approached, felt that it would be best to keep the two societies separate judging on the nature of India Soc the year before. To eliminate any animosity and friction, it was mutually agreed by the Presidents of both societies that they would keep out of each other's way and that they would organise their own activities and inform each other of their plans to avoid 'clashes' or conflict of interests.

So, the decision for a non-merger was not a personal one as suggested by Anil but one that was agreed by many.

As far as re-elections are concerned, I am prepared, even now, to call the members of both societies if that's what they want and take a democratic vote for a merger. Let me make it clear that I am not, and never was, bothered about holding the title of Mr President. I was only ever concerned at attempting to present to Asians a 'different side' to the events and activities that many of them are presently accustomed to. This does not mean that I disagree with discos and the like—only that I feel it is important to appreciate that some of us still have a strong sense of culture and tradition and enjoy the opportunity of attending 'cultural' events. It is a simple case of catering to the tastes of a different audience.

I would also like to point out that the organisation of a cultural event at College takes considerably more time, thought and coordination than a normal 'disco-type' event. Financially speaking, a cultural event is sometimes not as 'safe' as a disco-type event since it is difficult to predict a large, guaranteed student attendance. This was reflected by the first event that Asian Soc held on November 7 1989 which was cultural. Despite extensive publicity throughout the University of London, the event was not a financial success although of those that attended, each went away feeling that they had witnessed something quite unique. Yes, 'there were at least 100 people there' and yes, 'the tickets for the event were sold at an average price of five pounds'. But unfortunately 'Anil', since you weren't there, it probably didn't occur to you what the expenses amounted to for the band,

sound, lighting and publicity costs. Had you such insight, then you would have restrained yourself from insinuating naive suggestions such as 'all this adds up to a substantial income. So surely...we must search for the money in Swiss bank accounts?' Also, though it may disappoint you, the Union and the OSC have 'made a sufficient enquiry on this matter'. Every penny that has ever been spent or earned by Asian Soc has been accounted for in black and white so I see no reason for the Union or the OSC ever being 'afraid of losing face'. As far as my 'ego writing cheques the society couldn't cash' is concerned—well, I think, Anil, it is always unwise to jump to rash and false conclusions without some sort of corroborating evidence to back them up!

As far as the allegations pertaining to the so-called 'running of the society' are concerned, I would like to clear up a few misunderstandings. Although Anil seems convinced that 'the treasurer resigned due to quote 'dictatorship'...' perhaps, had he asked the treasurer in question why he really resigned, then he would have discovered that the real reason was due to quote 'excessive workload'. I would like to emphasise here that I believe that the success of any society rests upon the strength of its committee. If certain members of that committee are not prepared to offer their sincere services and accept a 'fair share' of the responsibilities, then the President has only two real alternatives—either to sit back and watch that society deteriorate or to have the courage to 'take-on' those responsibilities in order to keep that society 'alive'. If the latter is construed as a 'dictatorship' then it is surely a great sign of misapprehension.

If Anil, as a 'member of Asian Soc' feels that he can contribute something constructive to the welfare of the society, then I invite him to step forward and participate in its running. Otherwise, please do not mislead the readers of FELIX and especially the 'real' members of Asian Soc by conjuring up stories under some sort of pseudonym.

Yours,
Bartendu Gyas (DoC 2).

I am sick to death of jerk-offs like Anil Loadwa, who feel they have the right to write letters to FÉLIX under a pseudonym. Letters are accepted in good faith. Frequently the content of our mail bag disuades us from asking for a Union card check. If you want the freedom to write to FELIX you should have the honesty to put your real name at the end of a letter. We can withhold names and we do not reveal them in these cases—Ed.

Those callous Conservatives again

Dear Sir,

With reference to your article on the ConSoc poster of 23.2.90 'Support the Ambulance Workers, let the Patients Die' I thought you might be interested in the following incident.

Whilst attending as medic in the College ambulance on Saturday 3.3.90 we were called to deal with a person who had collapsed and stopped breathing in Kensington High Street. When we arrived artificial resuscitation had already been performed on the casualty by a member of the London Ambulance Service who was collecting money nearby. If he had

not done this the casualty would have certainly died. Once all life systems were working again he called the L.A.S. directly and incidentally from the normal 999 channels to give us better information on the locality and disposition of the casualty. He also was good enough to give a statement to the local police.

It is therefore blatantly clear that it is not the ambulance workers who gain support from people dying in the street, but the callous attitude of certain members of Her Majesty's Government and their supporters.

If the statement on the poster was the Conservative

Society's idea of satire then it has surely backfired, as a large proportion of the drivers and medics operating the College ambulance are Trade Union officials within the College (including myself) and one of the rules of any Trade Union is to preserve life (there is no such rule in the constitution of the Conservative Party).

Since ConSoc is so concerned on this matter I am sure they will make a donation to the Imperial College Ambulance Fund to help pay for the replacement of the vehicle paid for by students' efforts in 1979.

N. Royall, Dept of Geology.

£4 million CCUs fiddle IRC

The Wellcome Trust has awarded £4 million to the Life Science division for research into the epidemiology of parasitic worm infections like bilherzia or gastro-intestinal worm diseases. This is the biggest award the Trust have ever given.

Professor Roy Anderson, Head of the Biology Department, said that such helminth (or 'worm') infections afflict a third of the world's population, and it is not understood how they manage to circumvent the immunological system.

He added that the new research centre would be situated in West and East Beit. 'We will use existing space and modernize the labs. It will involve a lot of re-organization'. He said that postgraduates would be involved and that there will be a strong overseas component.

Boring

The Committee of Vice-Chancellors and Principals (CVCP) have put forward their alternative to the Government's students loans proposal. It is based on a combination of grants and a graduate tax.

The scheme would include a non-means tested full maintenance grant based on regional differences, followed by an income-related tax through National Insurance contributions or the Inland Revenue.

The Vice Chancellors believe that this is a simpler and fairer system, though Mr John McGregor, the Secretary of State for Education and Science, dismissed the idea, saying that the National Insurance scheme could never become a debt collecting agency.

The government have released plans in which all students applying for loans will have to give the names of two referees who may be approached if the student defaults on payments. Defaulters may be blacklisted or have property repossessed.

ICSO

Imperial College Symphony Orchestra will be playing Shostakovich's 10th Symphony and Tchaikovsky's first piano concerto with Vanessa Latache on the piano today, Friday 9th March.

Tickets cost £2.00 on the door of the Great Hall and the performance will start at 8.00 pm. Advance tickets are available from the Haldane library.

Wanted

1990 Careers Fair Manager

The Union needs someone with experience of administration and business who can motivate a team. The successful applicant will be paid £120 pw plus a profit-related bonus for 1 week's work over Easter and 12 weeks over Summer as well as work over the time of the Fair itself. Anyone wishing to apply for the post should contact Fiona Nicholas in the Union Office by 1pm, 19th March 1990

Money from the career's fair will be used to buy computing equipment for the three Constituent College Unions (CCUs), despite objections from Imperial College Union President, Mr Neil McCluskey. At a recent meeting of the Industrial Relations Committee (IRC), the committee responsible for overseeing the money from the career's fair, decided to spend some of it on laser printers for the CCUs at an estimated total cost of £8000. The only people at the meeting apart from the chairman, Mr Nick Lay and the three union office sabbaticals were the presidents of the CCUs.

The decision has led to a call from Mr McCluskey for the committee to be made more representative,

with places guaranteed for representatives from the major sub-committees (MSCs). At present the MSCs have only an observer status. Mr Lay is currently looking into the scheme.

In addition, about £3000 of IRC money has been earmarked for the college day nursery and a further £3000 is being given by the union to support the college careers service. Up to £1000 can be used for subsidising student conferences. This leaves £5000 which has not been decided on as well as last year's residue of £9000.

It is known that Imperial College Union would like a new computer system, further reducing the money left from the career's fair.

Important

Students are urged to complete their lecture evaluation questionnaires which will be coming around soon. Shaun West, RSMU Academic affairs officer, pointed out that it is only if upwards of 70% of students complete the forms that lecturers will take notice of the results.

He added that lecturers who score badly are called to see the head of department to discuss why they are considered bad lecturers and it is well worth while to spend the few minutes completing the form. You don't have to be bored by your lecturers!

Iran pays

The Royal Borough of Kensington and Chelsea has received payment of £500,000 from the Iranian government for the borough's maintenance of the Imperial Hotel in Queen's Gate.

The Shah's regime bought the building with the intention of converting it into a cultural centre. After the Islamic revolution, the building became a low priority for the fledgling Iranian government and the Borough had to encase it in scaffolding to ensure public safety. The Iranian government has now repaid the debts incurred.

A spokeswoman from the Borough Council said they did not know what the Iranian government's intention with the building was.

Going down

Mr William Goodwin, the editor of last year's 'Felix', finished his appeal to the House of Lords yesterday (Thursday). He is appealing against the decision that he was 'in contempt of court' in not handing over information to the authorities which may reveal the source of his stories.

Mr Goodwin is a trainee journalist on 'The Engineer' magazine. The editor of 'The Engineer', Mr John Pullen, said that the lawlords had retired to make a decision, which would be returned within five weeks. He said that Mr Goodwin had borne up 'remarkably well - there is a huge amount of respect with how he's coped with it all'. He added that 'We thought we were listened to with sympathy by the lawlords it will be decided on points of law rather than journalistic ethics'.

Lecture

The director of the IC Humanities department, Mr Eric Stables, will be giving a talk under the title 'Satire on Campus: Universities and the Comic Novel'. It will be held in the Read lecture theatre, level 5 Sheffield, at 1.15pm on Tuesday 6 March.

Telephone shock

New telephone numbers have been brought in for some college facilities. They can be used as direct outside lines if prefixed by the code '225'. They are as follows:

Royal College of Science Union; extension 8675.
Royal School of Mines Union; extension 8674.
City and Guilds Union; extension 8673.
Union bar; extension 8671.
Imperial College Union extension number 3506 is now 8670.

IC ENTS SPRING DIARY

Fri 9th	BASS DANCE	Reggae
	Support: Red Ten	
Fri 16th	ROCK NIGHT	Guitar band
	Support: Stage Fright	
Fri 23rd	DEATH BANG PARTY	Crazy funk

In the Union Lounge

★ LATE BARS!

★ LATE DISCOS!

Tickets on sale in the Union Office