

Founded in 1949

The Newspaper of Imperial College Union

## £1m COMPUTER FOR ICCC?

Imperial College Computer Centre (ICCC) is hoping to replace one of its two existing computers with a new machine within the next two years.

This announcement follows the replacement last year of one ageing computer by a more upto-date machine of equivalent power. It is the very high demand placed upon the Centre's current system that has prompted this move. During termtime ICCC can expect to process 5,000 small jobs and around 2,500 larger ones each week. In addition, over 200 users may be simultaneously logged-in to the system at peak hours.

The Centre is looking for a computer that would enable ICCC to run bigger interactive jobs than are currently possible, thus opening up new possibilities for developments and applications. But all interactive users, even those who only run small jobs, will benefit from the installation of a new machine,



Arthur Spirling, the Computer Manager behind the deal.

since it is expected that any replacement would have twice the throughput capability of the old machine.

The cost of the computer will be met by the Computer Board of the Department of Education and Science who have already approved the purchase of a new machine in principle.



The computer room at present. The terminal being studied is linked to the Cyber 170/720, the machine which would be sold if the deal goes through. Photo: Dave W Parry

### High-rise Flats

A 20% rent rise for the Southside Penthouse flats was pushed through at the end of a long meeting of Student Residence Committee by ex-Senior Warden Dr Don Monro. This was in spite of a maximum 4% rise in any other rents.

The penthouse flats, the subject of much controversy since they first became available, are now priced at £120pcm per head for a four person flat. This compares with about £80 for premises in Fulham, and around £100 for Head Tenancy flats. The rises resulted from a survey in which prospective residents, when being interviewed, were asked if they would pay £140pcm, and since none raised objections, it was suggested that a 20% rise was doing them a favour.

The new price rises brought heavy criticism from Council on ex-President Nick Morton, because there will be no chance to reverse the decision since the Student Residence Committee does not meet again till next term.

# Southside Move: We're Not Going

The controversial and much publicised Southside move has been shelved. The plan, had it been accepted, would have resulted in the total move of all the Union facilities from Beit to Southside, beginning next July and continuing over the following year.

Negotiations were begun last Feburary between John Smith, the College Secretary, and Nick Morton then Union President. Mr Morton kept very quiet about the whole thing and it wasn't until June that knowledge of the proposed move was made widespread. A final yes or no answer was expected from the Union in the coming autumn term, and had the answer been yes the Union would have been committed to the move.

Recent discussions between John Smith and Steve Goulder, however, indicate that College is now taking a very different attitude. The current proposals are that the Union should take over and utilise some of the space in Southside which College has no use for, whilst maintaining all its facilities in Beit. A complete move is still open to negotiation, and indeed it seems not unlikely that College will eventually point out that if some of our facilities are in Southside we may as well move everything across for greater convenience. But, this would not be until next year or even the year after, and there is plenty of room for discussion.

The reasons for the change in plan are unclear at the time of going to press, but it seems likely that College has been influenced both by financial factors (the cost of a total move is now estimated at  $\pounds^1/_2m$ , twice the original estimate) and by the outcry made by the Union at the end of last term, which cast doubt on the possibility of the proposals gaining the approval of the student body.

#### **Prints Charming**

Peter Dawson has joined the FELIX staff as a replacement for printer Ian Morse.

Ian left the Union after eight years service to become a fulltime musician

#### Kneecapped

Ken, the popular Beit security guard suffered a serious motorcycle accident last month when a car pulled out in front of him. As a result of this he has had to have part of one kneecap removed.

The FELIX staff would like to offer Ken their sympathy, and hope that he will be back on his feet again soon.

#### New ties for old

A new design has been produced for the ICU Social Colours tie because in the opinion of various suitably qualified persons, the old tie was absolutely disgusting.

The pattern of the re-vamped attire is a repeated series of stripes in silver  $(^2/_2")$ , gold  $(^1/_8")$  and navy blue  $(^1/_2")$ .

As usual it may be purchased from the Southside Shop by suitably qualified persons.



The new printer, happy in his work. Photo: Pallab Ghosh

#### Captain hangs on

College block yesterday denied that Captain Lindley is to retire earlier than was originally expected. A popular rumour has been spreading in both the Union and Sherfield Building to the effect that the Captain will retire before December 31, but official sources reaffirmed that he has no intention of retiring until then.

#### Tourists Mugged in Southside



The latest move in marketing IC regalia has already reached the Southside Shop and will soon be followed by glasses, also engraved with the IC coat of arms and motto.

The mugs, which sell for 80p, are very popular with the tourists who stay in the Southside Halls. Trade has fallen off slightly now the tourists are leaving, but at the peak of the season they were "selling like hot cakes" according to staff in the shop.

Mug-shots: Dave W Parry

#### Union completely in the dark as workman drills through cable

Photo: Dave W Parry



The current state of the Union Lower Lounge as workmen prepare the old cloakroom and pinball area for the coming of the new food counter.

The Union Office was left without lighting for several days last week when an electrician working in the Lower Lounge drilled through a mains cable in an underground duct. Because of the proper earth connection the man was not hurt.

College maintenance were called and immediately made sure there was no possibility of further danger resulting: this involved disconnecting the power from a large part of the Union Building including the Union Office, the Concert Hall and the Dramsoc Storeroom. Dramsoc were particularly concerned, since they had a full dress rehearsal for their Edinburgh Fringe shows planned for Tuesday evening. They made arrangements for an alternative power source, but it was not necessary to use it since the cable was repaired on Tuesday morn-

Alf Toft, the surveyor responsible for the Union Building, expressed great surprise that a cable should ever have been laid in the duct, since there are many more suitable places for it to pass. It was impossible to check its position beforehand since the plans, which date from the time when the Union Building was built, have been lost.

The Union Office will be closed between August 21 and 31.

•Collators for the Union Mailing are required, £1.50 per hour for Monday and Tuesday, September 13 and 14. Names to Union Office by Tuesday September 7.

•Austin 1100, F reg, recon clutch, gearbox, 6mth MoT, tax, only 2 owners, excellent condition for age, £250, int 2033 or 644 5048 eves.

●Large fridge, £20, contact Martin S Taylor, FELIX Office. •Left at London Student Travel: One

pair of dark blue shorts.

pair of dark blue shorts.

Found. Has anyone lost a blue jumper (with IC CND badge) or a suede coat? If so please claim from ICU Hon Sec's Office.

Scarf. Remember the missing blue/grey woollen scarf one two terms ago? No, well I found it...in Nick Morton's office. Apologies to everyone except NM to whom I gracefully extend two fingers. Jon Barnett, ICU Welfare.

Weltare.

Student cleaners needed in Southside/Linstead Halls, 0900-1300 hours, £1.70 per hour (time and half on Saturdays and Sundays). Either 6 day week (including both Saturday and Sunday) or Saturdays and Sundays only. If interested, please contact: Miss Rowell on int 4268 (Linstead) or Mrs Thallon on int 3361 (Southside).

#### Welfare Committee Offer Freshers Advice on Sexual Problems

Preparations are well under way for a new Union publication this year. Following in the footsteps of the Rag Mag and Handbook comes the "Welfare Handbook", which will be issued free to freshers at the beginning of next year, and is designed to offer a range of information on matters which people may not know about and may be embarrassed to ask about.

The idea is based upon the "Little Blue Book" produced by 'WOLS' of Oxford, and the Cambridge Little Blue Book Committee. This is a publication that deals purely with sexual matters (contraception, abortion, pregnancy, etc). It seemed, however, that this was somewhat too narrow a scope and facts about drugs and the police have therefore been included.

The publication is still nameless; the title used by others seemed inappropriate and noone has as yet come up with an alternative, so suitable suggestions are still being sought. Any good ideas please to the FELIX Office rapidly—liquid reward.

#### Hon Sec's

External Telephones

Just to clear up (I hope) some confusion over the use of external telephones for Union business after hours (ie after 6:00pm and at weekends). Please note that club and society members have to contact one of the sabbaticals to get an outside line. For private long distance or overseas calls you should go to a messenger's desk (see page (iv) of the College telephone directory for other details). Car Parking

As from the start of term (4 October) the Car Park barriers will only open with the new key card, so will all Union members who currently have old key cards please return them and collect their deposits sometime.

Permit application forms are already available from the Union Office and completed forms should be returned by 5:30pm on the Friday of the first week of term, ie 8 October.

Union Office

This will be closed from August 23 to September 1, inclusive, as most of us will be on holiday (or

#### Why Not Take A **Cold Shower** In The **Sports Centre?**

The Sports Centre is closed for its annual period of summer maintenance, and it will re-open sometime after the bank holiday. The boilers which supply the showers in the Centre were shut down before it closed, and so anyone using them found the sprays only gave cold water.

#### **New New Tenancy**

Estates have successfully completed the deal to hire the Fremantle Hotel as a new Head Tenancy as reported in FELIX 619. In addition, they are hiring the Sovereign Hotel for nine months which will be used exclusively for postgraduates.

#### Sick Bay Healthy

The College sick bay, threatened with closure unless finance could be found, is to be reprieved by an extra levy on Hall rents.

The sick bay provides somewhere for those not ill enough to be in hospital, but too ill to be alone to be looked after. In the past students have been able to take examinations there, when they would otherwise have hade they would otherwise have had to retake a year. But the sick bay is expensive to run, and was to be closed unless extra money could be found. A scheme to raise money through registry from all students was abandoned due to lack of co-operation, leaving Hall rent bills as the only option.

The scheme is not as unfair as it may seem, as almost everyone who lives away from home (and so would not need the sick bay) now spends at least one year in Hall. The scheme also represents very good value; for around £10-15 you get cover for three years, yet that is at present the price for less than one week in sickbay.

all of us, depending on whether you call two weeks playing at Edinburgh Fringe Festival a holiday or not!).

Hope you have enjoyed\*/will enjoy\* your hols.

Take care.

\*delete as appropriate.



Caroline Metzger has just taken up a new position as Senior Clerk in Student Services. Brought up in Hong Kong, Caroline studied at secretarial college in Oxford before coming to work at I.C.

Photo: Dave W Parry

#### Passwords scrambled after major breach of security at ICCC

On Tuesday July 13 a computer user inadvertently gained access to secret passwords while using the Imperial College Computer Centre ICCC) system.

The user was attempting to use the Backup/Reload facility to copy files from magnetic tape onto disk when the error occurred. It was the inclusion of a rarely used option in the 'Reload' command that caused a crucial system program to fail, allowing the user access to the file containing 6,000 user numbers and secret passwords.

Mr Arthur Spirling, Operations and Service Manager at ICCC received a letter from the user on Wednesday July 14 informing him of the breach of security. He reported to the Users' Advisory Panel—a committee representing users' interests-and recommended that all passwords on the system should be changed, a move which they agreed to, and computer users who had not changed their passwords by August 6 found that the passwords had been 'scrambled' as a precaution. A one line addition to the faulty system program was all that was required to correct the problem. There now exists no further possibility of the same system fault occuring again.

This is the first time that a breach of security at ICCC has been the fault of the Centre. Previously, only deliberate attempts by malicious users have led to a small number of passwords being discovered. The biggest single cause is the fault of users themselves. Frequently, those that make use of terminals that print on paper, log-in to the ICCC system using an abbreviated form that leaves their passwords unobscured. They then fail to properly dispose of this piece of paper, often leaving it lying around for anyone to pick up.

Mr Spirling stressed the importance of users regularly changing their passwords as a means of protecting their programs. The episode has proved useful for some users, since several have commented that they had not changed their passwords for over ten years.



## Hiccups in the Union

Sir

It appears that since the new Exec took office, there have been several 'hiccups' in the normally smooth running of the Union, not to mention a certain amount of bickering amongst sabbaticals. It strikes me, as an observer, that this is entirely the fault of our new Hon Sec Miss Freeman. Having come into the post with little experience of the higher (more rarefied) echelons of IC Union affairs, she has made several unwarranted assumptions about the nature of a sabbatical's job and about the general workings of the Union.

She has, very unfairly, assumed that the object of the Union is to promote the welfare, and social life of IC's students. This is not the case. The object of the Union is to promote the welfare, and social life of IC Union's officers. It is to provide a nice cosy little office for pompous fools to sit in whilst they think pompous presidential thoughts, whilst gazing adoring at their own picture on the wall. (Left-hand wall, half-way along). It is to provide storage space for cricket gear, whilst the acting DP happily pretends his job consists of throwing darts at people's pictures, and the Union Building falls apart.

She has assumed that a sabbatical's job is to co-ordinate and administer the Union, to work to promote the interests of IC's students and to represent their views to College.

Of course this is not so; any fool can-see that the job of a sabbatical is to bitch about other Union officers, to work in one's own interest (if one has to work at all) and to represent College's views as Holy Writ (for further info ask Opsoc about this).

She has assumed that it is in the interests of ICU to attempt to solve problems, disseminate information and to keep the wheels turning. It is not. The interests of ICU are best served by drinking Mrs Pingree's sherry, by getting ratted wherever possible, and keeping the students as much in the dark as possible.

It is essential that she be stopped before irreparable damage is done to the Union's reputation. With a few more months of her troublemaking, who knows? The Union may end up making a decision in its members' best interest or, God forbid, even take action on such a decision.

'Eric' Jarvis
PS: For Christ's sake, not only
is she a woman, she's not in any
of the tie clubs: how can she be
expected to know anything?

#### Lies and Rumours

Dear Martin

Oh no! Not again!

The Union Office was thoroughly searched. The box was not there before the weekend. Late on Monday afternoon Mary asked Jen for some boxes. Jen looked in the corner of the administrator's office, where spare boxes are often kept. Inside this particular box was Mike.

Admittedly the Union Office is not as secure as it could be, but what *can* you do when the

hobby of certain sections of the student community is collecting keys and generally entering places?

We were trying to keep Mike's re-appearance a secret in an attempt to discover the "thief's" identity, but it was decided that this was not practical since security had to be informed so that they would not be expending time in fruitless search. Hence the rumour version—that Mike had re-appeared somewhere in the Union Building and that Christine had found it on her "rounds".

Please, please in future, do check to make sure your facts are straight.

Yours sincerely
Mary Freeman, Hon Sec
Jen Hardy-Smith
Union Administrator

#### **Bar-gains?**

Dear martin

I would like to draw the attention of you and your readers to the pricing policy of Southside bar viz. Prices have been raised for the vacation and will be reduced again when term starts. This means that IC students who remain during the vacations, mostly PGs, are discriminated against.

Assuming that the union doesn't implement discriminatory policies for the sake of it, I can see two possible but unsatisfactory reasons for this.

It is obviously a good idea to raise prices to rip off tourists, but this policy also rips off IC students. If this is the reason it should be possible to find a way round it by having one price for students and another for tourists.

If there are fewer customers during the vacation it could be argued that each customer should pay more. It would be more appropriate for customers in term and vacation to pay the same price,-one which would make the bar viable in the year. It is ridiculous to calculate prices in term time on the assumption that the bar will dissappear along with all its overheads when the vacation comes and then charge a higher price out of term. Responsibility for the bars existence out of term should be shared between all its customers and not foisted arbitrarily onto one section of them.

Yours sincerely
Paul Kirkman
Physics PG

#### It's a Vet's Life

Dear Martin

In reply to Jon's letter in the last issue of FELIX, I must say that I too was shocked by the revelation that we have had an imposter in the Union Office, but surely it should be future Presidents that are positively vetted?

Yours sincerely Mary Freeman ICU Hon Sec

PS: As regards my positive vetting I believe he has already intimated elsewhere that this is definitely not necessary in my case.

PPS: Why does he not want to offer his services for the task?

Dear Martin

Although the letter appeared in FELIX three weeks ago, I feel I must confirm Jon Barnett's accusation that the so-called "Nick Morton" does not hold a birth certificate in that name. I have documentary evidence to this effect.

However, I am concerned that Jon does not wish to offer his services for positive vetting of Mary Freeman at regular intervals. When will Jon realise that, as an officer, one does not offer, one is mandated? I am sure a UGM or Council will realise the benefits of mandating the Welfare Officer for this task. After all, who could be more appropriate when it comes to matters related to the well-being of all IC students?

Yours
Captain Mint
Starship Enterbar

#### Bloodbath in Beruit

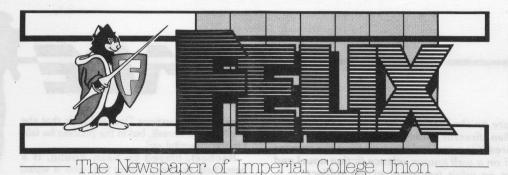
Dear Sir, Peace be Upon You,

It is clear from their continued campaign of genocide against the civilian population of Beruit that the Jews have a callous disregard for human life, except that is their own! To wit: the destruction of a block of flats (6/8/82) in which 250 were killed—mainly Christian women and children—or, the demolition of a mental hospital and lately

(12/8/82) the 10 hour sustained blitz, with an as yet unknown number of fatalities, during a supposed ceasefire! Yet, if the Jews were to read their own Holy Scriptures they would find that the sanctity of life is stressed strongly.

The slaughter of innocent civilians in Beruit is not just a local disaster but a crime against the whole of mankind and the perpetrators of these crimes will meet just Retribution in the Hereafter, along with those who had the power to stop the bloodbath but who in fact did nothing: namely the USA.

Yours T Sheriff Chem UG 2



## Thefts from the Union Building: Who's really to blame?

Security in a building the size of IC Union is bound to be a problem, the more so since it is the responsibility of the Deputy President to prevent unauthorised access, and fulltime Deputy Presidents are in short supply at the moment. Nevertheless, the other Union officers seem to be taking the matter very lightly to be able to cheerfully assert that "...the Union Office is not as secure as it could be" (Mary Freeman and Jen Hardy-Smith, Letters). Why on earth not? The Union Office houses amongst other things several electric typewriters, a duplicating machine, a photocopier, all the Union records, a television set, a cupboard full of silver trophies (which were stolen two years ago) and keys to the rest of the Union Building. Surely when a room holds property which is so temptingly thievable it should be made as secure as possible?

Mary and Jen continue their letter by asking "What can you do when the hobby of certain sections of the student community is collecting keys and generally entering places?"

This is rather like asking how the Health Service can run efficiently when people keep falling ill; a security system exists to stop people entering buildings they aren't supposed to, not just to warn them away from somewhere they aren't allowed to go. If intruders do get in, whether serious burglars or students out for a joke, it shows the security system is not as tight as it should be.

In a College such as IC, students are basically honest, inquisitive and mischievous and it is part of their nature—a part which sound scientific training should encourage—to inquire, investigate and experiment to find ways round the problems they set themselves. If they want to get into a locked building (and many of them will try) it should be regarded as a test of the building's security staff whether they succeed, and not as symptomatic of the rebellious and anarchic mentality which Mary and Jen seem to suppose.

Much of the blame for the lack of security lies with the ex-Deputy President Barney McCabe. He made little secret of his hobby of 'collecting keys and entering places' and well appreciated the problems of security in the Union Office. To this end he invested a considerable amount of Union money in a new set of ASSA locks with blanks which

were not easy to copy. He then fitted these new locks to most of the doors in the Union Office. Most? Yes, his typical inefficiency (or laziness) stopped him completing his job, with the result that students with keys to the old locks were still able to enter the Union Office to steal Mike. Now, because of general laxity, several keys to the new locks are missing, and security is as bad as ever. In fact, it is even possible to get into the Union Office without keys at all if you have the necessary knowledge, effrontery and luck.

In case you've got the impression that I condone the breach of security to steal Mike—I do! As I said in my last editorial I find it very funny that someone had the wit to highlight the Union's failings so humorously, and can't bring myself to condemn the theft of an object which exists specifically as a challenge to potential thieves. But I do hope the Union staff make their office more secure before less frivolous intruders intrude.

#### Trying the soft sell

When the idea of moving the Union to Southside was first mooted, cautious optimism seemed to be in order. Premises in Southside are underused, and it is in everyone's advantage to have the Union situated as near to the main Halls of Residence as possible. Plans had been drawn up after long consultations with a responsible Union President, and despite protests from certain factions who hold a strong sense of tradition (notably my two predecessors) it seemed that the Union could well benefit from such a scheme.

But College's attitude is changing. Right from the start John Smith has been holding his cards close to his chest. The move was proposed last March, but the plans were not revealed to the student body until the very end of May, shortly before the end of term and certainly not allowing enough time for sufficient debate on the matter before undergraduates went home for the long vac. It was then revealed that for the move to take place in September 1983, the Union would have had to approve the plans by the end of this coming October, only a few weeks after undergraduates had reassembled. Caution began to harden into suspicion.

Now the suspicion is turning to distrust. College is trying a different tack. Plans for the move have been shelved for the time being while college offers more facilities in Southside; very generous, but we should still be wary of their motives. In a year or so, if Mr Smith points out to a different Exec that since we have so many Union activities based in Southside it might benefit us to move the whole Union there, it will be as well to remember the methods that were tried the first time, and to examine the options very carefully.

## Who's kidding who?

The centre paragraph of Mary and Jen's leter has been dealt with above in some detail: let us now consider the first paragraph and compare it with the last. The letter opens by berating FELIX for factual inaccuracies in the lead story last issue, and it cannot be denied that two specific details mentioned, although trifling and inconsequential, were reported wrongly. But how can the Union have the cheek to criticise FELIX for this when two paragraphs later they admit to spreading deliberate lies on the same subject? It is the editorial policy of this newspaper (now, at any rate) to report events and happenings at IC as truthfully as possible. But what can you do when the hobby of certain sections of the Union staff is spreading rumours and generally misinforming people?

#### **FELIX News**

Not quite as many changes as I'd hoped in this week's FELIX. The new cover isn't ready yet (unavoidable technical problems) and there is no sports news or What's On pages. The main change you'll probably notice is the layout of the letters page; this is something I promised in my manifesto (those of you who remember it) but didn't have enough letters for last time. Making interesting layout isn't easy with a fixed amount of material, and so in common with most newspapers, I reserve the right to edit letters, or even not to print them at all in exceptional cases, although I'll try to make sure this only happens rarely. And I also reserve the right not to correct grammar, spelling or punctuation in letters; if you want to display your ignorance I'm not going to stop you.

A special welcome to Peter Dawson, our new printer, and the usual thanks since this issue would have been impossible without... Nick, Nick, Nick, Nick, Steve, Peter, Peter, Mark, Pallab, Dave, Young Boy, Maz and anyone who turns up to collate. The next issue will be the Freshers' Issue on October 4. Copy deadline is 5:30pm on Wednesday September 22. All help will be gladly appreciated on that issue, especially the mammoth task of collating it which will take place over the weekend of October 2 and 3.

Martin S Taylor

the move have been shelved for the time being while college offers more facilities in

BLADE

This week FELIX presents a special feature on the forthcoming science fiction epic Blade Runner, the latest project from Alien director Ridley Scott.

The film is set in the near future and represents a major departure from the current trend in science fiction movies. It is based on a well known science fiction novel and has already been heralded as a return to an adult treatment of the subject.

Visually, it may also present a frightening and definitive vision of the city of the next century.

which were essentially flesh and blood human

beings, apart from the fact that they were

genetically engineered rather than born. In the

book he falls in love with one female android

and grows increasingly disillusioned with his

job. It deals, very effectively with man's

response to his own creation which is basically

the screenplay for the film. To adapt the book

for a big screen treatment they have left the

bones of Dick's novel and created an equally

challenging and serious film. When Dick

himself saw the final screenplay he was

reportedly ecstatic, but he tragically died in

Blade Runner is set in the near future and,

unlike the book, it has an overpopulated city

for its location. The streets teem with life and

the predominantly Asian community fill the

streets in a never-ending stream of noise and

confusion. The opening shot gives a

panoramic overview of the polluted city;

massive towers belch enormous flames above

the hundred storey apartment blocks. In the

distance we see two massive pyramids which

disrupt the skyline. These are the head-

quarters of Tyrell Corporation who create the

replicants for off-world use. The camera slowly

advances to these buildings and we see

Holden, another Blade Runner, screening

workers believed to be replicants who have

infiltrated the organisation. He discovers one,

For this reason Deckard is transported back

to police headquarters in a spinner (a

marvellous flying car) and sent after the four

Nexus 6 replicants by his redneck boss Bryant

who refers to the replicants as "skin jobs".

Harrison Ford stars as Deckard and is

formed into a sort of Philip Marlowe character.

Traces of this homage to the film noir style

(typified by The Big Sleep) become more

apparent as the film progresses. Ford narrates

at several points: "They don't advertise for

killers in the newspapers. That was my job," he

slurs in his opening shot. He is sent to the

Tyrell Corporation to find out more about the

Nexus 6 from its creator, who insists that he

trys the Voight-Kampff test on his assistant

Rachael to see if it works on a human. After

but not soon enough to save his life.

February prior to the film's release.

Hampton Fancher and David Peoples wrote

one of segregation, fear and repulsion.

The year is 2020. Four rogue androids—genetically engineered beings which are virtually identical to humans—have brutally murdered a space shuttle crew and inexplicably returned to earth, where "replicants" are outlawed. Rick Deckard, former Blade Runner, is called on to resume his old profession and track down these killers in the overpopulated and polluted confusion of Los Angeles.

The Blade Runners of the title are basically bounty hunters who are trained to detect and eliminate any replicants found on earth (this is called 'retirement' rather than murder). The reason for this is simple: the androids are near perfect copies of human beings, the only difference being a built-in four year lifespan and a lack of emotions. Apart from this they are of at least equal intelligence and greater strength and when they realise their peculiar position in society (one of virtual slavery) they rebel against their creators with uncontrolable violence. Hence they are banned on earth and (being expendable) they are left to spearhead the dangerous colonisation of outer worlds.

To add to the inherent dangers, these particular androids are highly advanced Nexus 6 models, who are believed to be capable of developing emotions. The Blade Runner's primary detection tool is the Voight-Kampff test—a sort of glorified lie detector which gauges the level of empathic response to a set of questoins—and so partially developed emotions make detection extremely difficult.

The film is firmly based on Philip K. Dick's novel Do Androids Dream of Electric Sheep?, which is regarded by many science fiction fans as the definitive android story. It took Rick Deckard and pitched him against six androids,



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Rutger Hauer as Roy Batty

hundreds of questions Deckard finds that she is a Nexus 6 herself, but in the process he falls for the beautiful girl.

Rachael, played by Sean Young, is a beautifully groomed young lady who is styled on the Ingrid Bergman/Lauren Bacall heroin. Doubting the results of her test she persues Deckard and reveals a series of artificially implanted memories—she is an experiment for Tyrell who has not revealed to her that she is in fact a replicant.

Deckard then sets out to retire the four rogue androids and the chief protagonist is introduced. Roy Batty, played by Dutch star Rutger Hauer, is the leader of the group. He is a remarkably effective villain, whose bleached hair and distinctive smile are more than reminiscent of the late Robert Shaw in From Russia With Love. Hauer gives a gripping



In J.F.Sebastian's apartment Deckard approachés a possible replicant. The room is full of harmless genetic toys created by Sebastian for company and his own amusement. It has a wonderful fairy tale look, but soon becomes a maze where Deckard is hunted by Roy Batty.

performance as he works his way toward a confrontation with Tyrell himself. This powerful moment, as the creation meets creator, is not the climax of the film but it opens all sorts of questions about the subject of androids.

The film finishes with Deckard pursueing Batty and his lover Pris to the apartment of J.F. Sebastian, one of Tyrell's genetic engineers. This is a marvellous set full of eerie androids which Sebastian has built as friends. The apartment is located in The Bradbury Building, another obvious homage as the set is lifted from the classic Outer Limits episode The Fiend with the Glass Hand (written by Ray Bradbury).

In the half light of this building, Deckard as the hunter becomes hunted in a stunning climactic chase which displays Rutger Hauer's talent to the full.

The outstanding star of the film is still the city itself though, which was created by a team

buildings at ground level were kept and merely built on top of, using advanced lightweight materials. This resulted in the hundred storey apartment buildings which tower above the older streets.

Bidley Scott draw many of the street designs

RUNNE

of highly talented people. The basic design

work was greatly influenced by Syd Mead, who

is described as a "futurist". This has nothing to

do with a taste for strange music but is more

concerned with his work designing highly

stylised vehicles for large motor companies.

Ridley Scott was not put off by the salary Mead

demanded (\$1150 per day) and commisioned

him to design a convincing spinner flying car.

Mead read the script and naturally added

backgrounds to complement his designs.

These impressed Scott so much that he kept

Mead employed for eighteen months on all

The result is what Mead calls a "retrofitted"

look; he envisioned a world where existing

items were rarely replaced, but improved and

added to. This resulted in cars with all sorts of

odd extras attached. More importantly the old

aspects of the film's design.

Ridley Scott drew many of the street designs himself (he studied at the Royal College of Art) and he took complete, almost obsessive control of the whole project. This ranged from supervising the effects and set construction to filming and editing.

As a director Scott's main fault is that he puts little depth into his characters. This was far more apparent in Alien, but worked surprisingly well in The Duellists. Here it works reasonably well and, although the Philip Marlowe narration is a little cliched, it does add depth to Deckard's character. The replicants are understandably enigmatic (after all they are supposed to be emotionless) but the film still lacks totally convincing characters.

One thing that is thoroughly convincing is

the special photographic effects work, supervised by the long standing team of Douglas Trumbull and Matthew Yurichich. They have an impressive list of credits ranging from 2001: A Space Odyssey and Silent Running to Close Encounters. Trumbull was particularly pleased that this was not just another space film with lots of pretty star fields and he rose to the challenge of producing a set of interesting effects economically. Ridley Scott insisted on a particular integrated look for the film and Trumbull hired a team of technicians who provided just that.

Scott required a murky, smokey look for the city itself. For the opening shot a marvellous cityscape was created (called Hades by the crew) which was filmed through vaporised diesel oil to give the heavily polluted feel immediately. It is difficult to believe that the model used was between four and eighteen inches tall and that the Tyrell pyramids were a mere five feet high.

The model spinner flying cars were extremely good, but unfortunately the full size version was not integrated well with the effects work. Even the continuous (and unexplained) rain in the city could not hide the obvious wires used to lift the full size spinners on take-off. As the spinners were the main link between the street and aerial scenes this is a great pity.

Ridley Scott himself despises the term "effects film", as he rightly insists that special effects should not be used just to prop up a weak story. In Blade Runner he knew what he wanted from the effects; the dark and smokey look is deliberate as well as the flare and haloes around light sources (which makes the spinners look remarkebly like some of the UFOs in Close Encounters). These were then successfully blended with the live action and never dominate the film.

For me the film had a few stumbling blocks which seemed odd, while not detracting from the overall enjoyment. For instance, it was easy to accept the leaps in the story which bring the characters together but some of the basic premises seemed a little shakey. For a start it is doubtful that genetic engineering will advance sufficiently to produce such perfect androids by 2020, less than forty years hence. It therefore seemed pointless to fix a date in the first place, as we could have managed perfectly well without. Admittedly Dick himself set the novel in 1992 (nobody's perfect) but he included a fairly plausible colony on Mars. The film goes much further in suggesting populated star systems which is highly unlikely by 2020. Considering that the film is aimed at an adult audience, the "near future" treatment seems inappropriate when it demands such a striking suspension of belief. After all, good fiction tends to be based on reasonably believeable projections of the present, so why not avoid any obvious pitfalls if you can?

Perhaps the most pleasing aspect of the whole film is the honesty with which the main character is dealt with. Those who go along after hearing Harrison Ford's name expecting Indiana Jones vs The Androids will be disappointed, as Deckard spends most of the time being beaten up by his physically superior adversaries. He develops into a quiet and fallible anti-hero which suits the general feeling of the novel very well. Scott has avoided falling into the trap of glamorizing his hero, which is a brave step considering the current trend in films.

Altoghether then, Blade Runner is an impressive achievement which succeeds on



Harrison Ford plays Rick Deckard, Blade Runner (a policeman whose job is to "retire" any replicants found on earth). During his pursuit of four Nexus 6 androids he begins to sympathise with these strange creatures.

many levels. It is both entertaining and serious and is presented with great visual style. The story itself may not be to everyone's taste, but it is transferred to the screen in a convincing manner which befits a film which may herald the return of serious science fiction as a genre. It is certainly more entertaining than the batch of shoot 'em up laser battles which have followed Star Wars and deserves a large audience with both confirmed sf and non sf fans alike.

Blade Runner opens on September 9 at the Warner West End.

#### Short Notice

John Milius' Conan the Barbarian is released next week and attempts to transfer Robert E. Howard's famous character to the screen (using Austrian muscleman Arnold Schwarzenegger in the title role).

Before any of you waste good money going to see this film, I should warn you that it is one of the biggest turkeys in years. There are few films I would walk out on, but this is one.

Milius not only wastes a reasonable story, but also throws away a promising villain in James Earl Jones (who supplies the voice for Darth Vader). Most of the dialogue is stunted or nonsensical and even an impressive mechanical snake is thrown away.

Avoid this one like the plague.

Mark Smith

## REVIEWS

#### Elderly and Infirm Tadpoles All Set For Edinburgh

On Tuesday night the College Dramatic Society staged an open dress rehearsal for two of the three productions they are presenting at this year's Edinburgh Fringe Festival. Our theatre critic Nick Bedding went to investi-

First on the billboard was the What D'Ye Call It by John Gay, a "tragi-comi-pastoral farce". Directed by the incomparable 'Eric' Jarvis (why does this guy always have to have inverted commas round his name?) this excellent choice of play demonstrated the no small talent present in the company. The Covent Garden Tragedy (by Henry Fielding) which will be in repertoire with the What D'Ye Call It was unfortunately not staged on the Tuesday night. That was rather a pity, I thought, because I was looking forward to this play which met with "the universal detestation of town" on its first night in 1732 (it was withdrawn after the first night), and had "an accident ridden first night" when aired 236 years later in 1968.



A pregnant Mary Freeman and the griefstricken moose as ghosts in the play-within-aplay. Photo: Dave W Parry

Next followed The Wire Guided Review containing no less than twenty sketches. The first, rather unfunny, sketch took place in what seemed to be an asylum canteen (if there is such a place), but the second sketch was definitely amusing. This was a 'This is Your Life' show but one in which the guest's most unpleasant an unsavoury aspects of his life were chronicled by a sort of 'God the Father' type figure. A bizarre 'father and son' sketch followed between the versatile Pallab Ghosh and Duncan Bateson, whose very expressive face and voice that carries very well is a real asset to the group. Duncan appeared in the next sketch where he was transported to the Land of Infinity to seek fundamental truths and the Marino sheep. There next followed something perfectly ludicrous: Pope John Paul II and an assortment of priests, nuns and monks were boogieing to his words using on his trip to this country (this is the sort of thing one imagines the Papal team would do after a particularly hard Papal visit). A policeman sketch and a party policy game led up to



Ian Forrester, this is your life.

perhaps the best sketch, a lecture by a professor on his long, rambling and elaborate thesis about smoking, love-making and cancer, delivered brilliantly by the talented Mike Pickup. A bus-stop sketch led straight on to a song by 'Eric' Jarvis. Although a talented guitarist and songwriter he has a voice like a grief-stricken moose. Dave Wheatley and Mike Pickup then played two 'arty' intellectuals who achieved a glorious piece of self-hypocrisy. Another song followed by the grief-stricken moose, and then a horrifying vision of Thatcherism taken to its extreme in a pay office where Chris Pickup (brother of Mike Pickup) is told the company has decided not to pay him that day and instead of groaning he ought to be bloody well grateful you've still got a job". A hilarious sketch by the Dave Wheatley/Mike Pickup team on two policemen attempting to philosophize gave way to a sketch involving a very long railing. Various eccentrics were chaining themselves to the railing: a fanatical adherent of O'Flannagan's molecular theory, a man concerned about the absence of elderly and infirm tadpoles, and a member of the SDP. 'Eric' Jarvis then played a vicar at his pulpit delivering a sermon on the biblical evidence for Christ's proclivity for the bottle. Territorial civil servants followed, and then an attack on the DHSS. The last sketch was different to all the others: each member of the company mentioned a current 'injustice' in this country to which the whole company replied sarcastically "This is British democracy. sketch jarred with the spirit of the rest of the review and should be thrown out. In any case it was quite incorrect.

The team have certainly succeeded in being different from the old footlights tradition and Not the Nine O'Clock News, etc and with some polishing up of timing and the order of the sketches should make a very witty evening. I wish them luck at the Festival, but perhaps most importantly, that they have a good time themselves.

The Winter's Tale by Shakespeare; The Prince of Homburg by Heinrich von Kleist; The Beggar's Opera by John Gay; Uncle Vanya by Chekhov

William Shakespeare's The Winter's Tale at the magnificent new Barbican Theatre is a romantic tragedy about the vagaries of Time.

Leontes, King of Sicilia (Patrick Stewart) suspects his wife Hermione (Gemma Jones) of adultery with their friend King Polixenes of Bohemia (Rag Jewers). He asks his servant Camillo (Bernard Lloyd) to poison his friend, but Camillo is convinced of Polixenes' innocence and they flee together to Bohemia. Leontes has Hermoine imprisoned and casts their new-born daughter into the wilderness. At Hermione's trial the Delphic oracle of Apollo declares that she is innocent and Leontes a tyrant, who will die without an heir if he does not recover his lost daughter. Almost immediately their son Hamillius dies, and Hermione collapses in grief, apparently dead. The abandoned daughter is found and cared for by a shepherd. Sixteen years pass and Florizel, Polixenes' son falls in love with her and decides to marry her despite her humble origin. They flee with Camillo back to Sicily where the young girl's true identity is revealed to Leontes. Leontes and Polixenes are reconciled, and Hermione is revealed by Paulina (Sheila Hancock) to be still living.

The Winter's Tale possesses strong elements of fantasy and magic but these are sadly unpronounced in this production by Ronald Eyre. The stage is for the most part rather bare and austere, but the odd surprise does pop up now and then as when Geoffrey Hutchings emerges as a cockney toast-master in a morning suit. In the first part of the play Leontes is in a state of mental turbulence, and in sudden outbursts voices his 'foul imaginings'. The sufferer is deluded yet half knows he is under a delusion, but Patrick Stewart's depiction is curiously unanguished and

unmoving.



Barbican Theatre: a scene from the Winter's Tale.

The Prince of Homburg at the Cottlesloe Theatre, although written in 1811, seems incredibly modern. Its author, Heinrich von Kleist, is one of the world's little-known geniuses.

Entirely without literary training, his eight stories are each astounding in concept and miraculous in form. The Prince of Homburg was his last play and it concerns a young cavalry officer torn between love and duty. The production by John Burgess at the Cottesloe is superb; it is strong, sleek and fast moving, and every sentence and paragraph of dialogue is laudably concise and perfectly expressive.

Also at the Cottesloe is The Beggar's Opera by John Gay. The set, and indeed, the whole theatre, is highly atmospheric. As soon as one enters the large black box which is the Cottesloe, one is confronted with a thick smokiness through which on the stage one can discern a large old bridge and beneath it the musty dark dwelling of the vagrants. This is the roosting place of beggars, criminals, tramps and cripples, who would return after a hard day's work obtaining money by underhand

The play revolves around Macheath (played by Paul Jones), a pimp playing a highway gangster, and his father-in-law Peachun (played by Harry Towb), the king of the beggars. The work is both a great comedy and a tragedy with great streaks of earthiness and bawdiness. However, the director, Richard Eyre, has shifted the scene from the eighteenth to the nineteenth century. In so doing it becomes an attack on Victorian hypocrisy in which the vices of the lower classes faithfully mirror those of the upper. Right at the beginning of the play wenchs lay out gas lights at the foot of the stage as if to put on a show. The central irony is then superbly enhanced: that the rich are patronising an entertainment that attacks their own values.

The songs in the production mellow magnificently with the words. Gay, who was a flute-player, chose the tunes from street ballads and added his own words. Some of the tunes are familiar to us today. Gay spent most of his writing life struggling against poverty, and although the roughness of society's lowest

class is portrayed in all its nakedness and grime, Gay employs a light heart as a great aid to survival.

One of two productions of *Uncle Vanya* by Chekhov currently on stage in London is at the Theatre Royal Haymarket. This production, directed by Christopher Fettes, can certainly boast about an all-star cast: Donald Sinden, Frances de la Tour, Sheila Gish, Bill Fraser, Ronald Pickup, Margaret Rawlings, Freda Jackson and Harry Andrews.

The whole play takes place in the 1890s in a country estate belonging to Professor Serebriakov (Harry Andrews), a retired professor of art. There is little plot as such but the brillancy of the play lies in its very perceptive analysis and exploration of human idleness. Chekhov's had a medical training and many of his short stories and plays display a scientific curiosity about details of human relationships as well as a doctor's compassion

geometry", and from this start the new movement of Cubism developed. In transferr-

ing a 3-D object onto a two-dimensional piece

of paper, the Cubists produce a sort of

transparent cross-section: the object is split up

into basic geometric shapes which support and

intersect each other. You find yourself looking

at the relation between them, wondering if the geometric scaffolding is about to fall down and,

as you look, the distinction between the

original object, which has become an

architectural construction, and the space in

introduced: in one picture several different

viewpoints appear together, as if you, the

observer, are not standing still, but walking

round the object and looking at it from

An extra dimension, that of time, is also

which it is standing, disappears.

and understanding. Uncle Vanya treads a fine balance between comedy and tragedy. The professor's household is as crowded and stifling as a small fish bowl. All the characters represent varying forms of idleness, the laziest being that of Uncle Vanya (Donald Sinden) who complains about the professor's scribblings on art as "twenty years of nothing". The professor causes such resentment in the household, but the irony of course is that the old man is not idle but busy and hard working and, most importantly, with a light in the distance to work towards, even if his work does add up to little.

Much of the choicest acting comes from Ronald Pickup, playing the country doctor Mikhail Lvovich Astrov. In fact he seems almost the central character in the play, so much so that the play ought to be called not Uncle Vanya but Mikhail Lvovich Astrov! An excellent production, it is well worth seeing.

Nick Bedding

# WALKABOUTLOOKSEE by Mobile Optics Inc.

I set off this week to visit several different exhibitions of pictures. Thought I, "different people get enthusiastic about different things, so I'll see how broad a spectrum I can cover." That was the theory but, before you read further, I'd better let you know I didn't make it...Why? Well, I started off at the British Museum, at the exhibition 'A Century of Modern Drawing', and became enthralled. I only left when they chucked me out. But I did manage one extra titbit, on my way back to College—I'll probably get round to that in the last paragraph!

The pictures at the British Museum are on loan from the Museum of Modern Art, New York; by all accounts one of the greatest collections of its kind in the world. The exhibition is set out more or less in chronological order, starting with drawings by Seurat and Cézanne from the end of the nineteenth century. These mark the turning point from Impressionism and from the idea of an objective 'truth to nature'. Cézanne's pictures say "everything in nature is

different angles. Picasso is the name that springs to mind in this context, and many of his drawings are on show. Pushed to its logical conclusion (or to its incomprehensible extreme, depending on how you feel about it!) Cubist theory leads to completely abstract forms. Recognisable figures and objects are not used, even for inspiration. The picture is the fruit of the artist's imagination and expresses a state of mind or a feeling. The attempt to express the invisible, intense world of imagination has produced many weird and some wonderful (?!) results. For example, a collage of freely floating pale blue squares! No line here, just the tension between the planes and the bare paper and the edges of the picture. Or a line; again completely non-objective, which moves around so energetically that it leaves black blobs all over the page. This art avoids, even

What is the point, other than entertainment? The only way I can appreciate it and try to understand it, is by seeing it as a reaction to materialistic society—I think its message is that man is not only matter, but is, above all, mind and feeling.

rejects, all the visual stimuli of everyday life.

Not all the drawings, by any means, are wholly abstract. Many of the artists explore the connection between imagination and the real world, and there's a fascinating section of surrealist art. The surrealists tried to express the subconscious in visual terms and their drawings and photo-collages have the same tinge of irrationality and unreality that colours a dream or a fairy tale.

Give yourself plenty of time to enjoy it—this exhibition is an experience, as well as the cream of a great collection.

Anybody living in the postgrad Hall in Montpelier Place? Well, just across the road is Cheval Place, and at number 25 the Wraxall Gallery is having a summer exhibition. For those of you not acquainted with the backstreets of Knightsbridge, I recommend an

A to Z! Five artists are exhibiting; all, loosely, inspired by the countryside. The paintings are in a completely different league from the drawings at the British Museum, but certainly worth a visit, and it's interesting to see what sells well. Most of Malcolm Ashman's watercolours have little red dots beside them (NB red dot = red sticky label, approx 1cm in diameter, stuck to wall beside picture; indicates that picture has been sold!). He paints romantic characters in formal gardens or symbolic settings, with some delightful quirks: 'Red Hat' is decorated with cherries; bright kingfishers hover and dart around 'Green Hat'. Ann Arnold paints mysterious corners of English countryside in delicate pastel colours. Prices range from £30 for watercolours to almost £3,000 for large oil paintings I didn't much care for. If anybody's offering, I'd like Diana Warburton's drawing of a Racing Pigeon.

A Century of Modern Drawing from the Museum of Modern Art, New York is at the British Museum, Great Russell Street, WC1 (Tottenham Court tube) until September 12, Monday to Saturday 10:00am—5:00pm, Sunday 2:30—6:00pm, admission for students is 50p (others £1).

Summer Exhibition at the Wraxall Gallery, 25 Cheval Place SW7 is on until August 28, Tuesday-Saturday 10:00-6:00pm, and it's free.



Pablo Picasso's 'Head of a Man', a water-colour painted in 1907.



Picasso's 'The Cock', a charcoal drawing completed in 1938. Both pictures are on loan from the Museum of Modern Art, New York.

Bored? Listless? Too much spare time over the long summer months? Why not sit back and stimulate your brain with the

## PUZZLES & GAMES PAGE

Winning Ways by Elwyn Berlekamp, John Conway and Richard Guy.

In many ways this is an unnecessary review. Those of you who read Martin Gardner's column in *Scientific American* will already be familiar with the name of John Conway. You will already have met his astonishing gift for using and explaining high-powered maths as if it were a child's plaything, and you will want this book. Those of you who do not read Martin Gardner will not know what I am talking about, but will not be interested in the

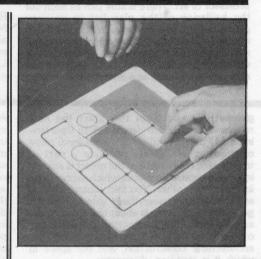
In fact it is actually two books. Volume One is subtitled 'Games in General' and set up a formal mathematical system which may be used to analyse virtually any game which is susceptible to analysis. The authors begin by setting up a series of axioms which define a game, and in the first half of Volume One ('Spade-work') they show how to analyse games which obey the axioms. 'Change of Heart' then shows how the analysis can be modified if some of the axioms are relaxed. The second volume goes on to show how the techniques of Volume One can be applied to 'Games in Particular' and it too is divided into two sections: 'Games in Clubs' which concentrates on competitive games, and 'Solitaire Diamonds' which includes not only a prodigious range of puzzles including several which were set as Scaramouche puzzles over the last two years, but also all kinds of other mathematical curiosities which didn't fit in anywhere else.

The mathematics concerned (particularly in Volume One) is not to be taken lightly. Part of the reason this review is in the postgrad FELIX is that most undergrads will find it rather too heavy going; not that any specific mathematical knowledge is required, just that curious clear-headed precision which mathematicians call mathematical maturity and everyone else calls pedantry (if they're being polite). But if this doesn't deter you, the book is a winner, in more ways than one.

Just to give you a taste of the contents, some of the more familiar games analysed include nim, dots-and-boxes, nine men's morris, hex, go-moku (like noughts and crosses, but get five in a row on an infinite board) fox and geese, and (encroaching on my brother's review) the de Bono L-game. The puzzles section takes on solitaire, soma, a great variety of metal puzzles of the type made popular by Pentangle, all the piano shifting puzzles ever set in the Scaramouche column, and a certain puzzle which orginated in Hungary......

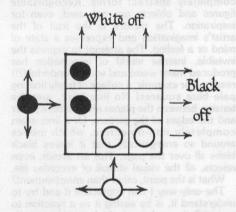
As the maths is rigorous and precise, so is the style of the book light and informal, almost to the point of childishness. The author's determination to illustrate every single point with a joke, pun, silly drawing or mnemonic is sometimes very funny, sometimes astonishing and occasionlly irritating.

My favourite game in the book is Phutball and I strongly recommend you to go to a



de Bono's L-Game is available from de Bono Games, Mountbatten House, Victoria Street, Windsor, Berkshire SL4 1HE for £4-95 including postage and packing.

bookshop and memorise the rules of this excellent game. Here, though, is the book's description of *Dodgem*, a game which has already fascinated many of the FELIX staff.



"Colin Vout invented this excellent little game played with two black cars and two white ones on a 3 x 3 board, starting as in the diagram. The players alternately move one of their cars one square in one of the three permitted directions (E, N or S for Black; N, E or W for White) and the first player to get both of his cars of the board wins. Black's cars may only leave the board across its right-hand edge and White's cars only leave across the top edge. Only one car is permitted on a square, and you lose if you prevent your opponent from moving."

Winning Ways is published by Academic Press at £21.60 (ouch!) in paperback or £63 in hardback. It's in stock at IC Bookshop, and I'll be recommending it to the Union book buyer.

Martin S Taylor

The L-Game by de Bono Games of Windsor, £4.95

The L-Game was invented in the mid-sixties by Edward de Bono; to meet a challenge to produce a game which has both the simplicity of noughts and crosses and the strategic skill of chess.

The area of play consists of a square board of sixteen squares. Each player has one L-shaped piece and there are two neutral pieces.

On each turn, a player *must* move his Lpiece to a new position, and then *may* move one of the neutral pices. Play alternates until one player has no legal move. This player is the loser.

Variations on this theme include Gold and Silver which involves finding two squares secretly selected by your opponent whilst he attempted to find yours. Added value is a similar game in which each player secretly assigns values to certain squares, and a predetermined total has to be reached, a player scoring points each time his L piece covers the square his opponent has valued.

I found the game absorbing and entertaining, the game being as involved and as skilful as the players want to make it.

Since the game is easy to make from cardboard, the price of £4.95 seems a little high. Nevertheless the game is well made from brightly coloured plastic and heavy duty board and for those who enjoy the added satisfaction of playing on a neatly presented set, the game is excellent value.

Jeremy (Oh my God not another) Taylor

### DINOCCHIO

A simpler puzzle this issue. I want you to find the largest number possible using only four threes. Only powers, multiplication, division, subtraction and addition can be used (eg 3 to the power 333 is permissible, but cosh (3333) is not). If you're not above 10 to the power 100, you're not really trying. No need to evaluate it—just leave it in the four threes form. Good luck everyone!

Solutions, comments and criticisms to me at the FELIX Office, please. There is a prize of £5 (donated by Mend-a-Bike) for the correct entry randomly selected at 1:00pm on Wednesday.

Last Week's Solution

Norman arrived first, then Len, Michael, Peter and finally Oliver. Out of four correct solutions, Patrick O'Hara, Department of Management Science, was the winner of the £5.

Scaramouche tells me that his final problems from the last FELIX of the summer term are now all solved. Several people solved 'Letters & Figures' and 'Sporting Chance' and Tim Pigden of Man Sci and Ken Morison of Chem Eng were selected as the respective winners.

The other two puzzles were each solved by only one person, so congratulations summa cum laude to G S Girolami of Chemistry and Simon Morrow of Maths who solved the chess puzzle and the furniture shifting respectively. All of the above four win £10, and all the prizes will be available for collection from the afternoon of Monday, September 6.

There isn't much point giving the solutions yet, since they'll only have to be repeated when the undergrads come back, so I'll keep you in suspense till then; but if you really can't stand it, the solution to 'Holding the Baby' is in Winning Ways, which is reviewed in the games review elsewhere in this issue.