

ATTENTION! 4th Year CS Students

There is a movement underway to organize the bulk purchase of "Class of 81 CS Grad" sweaters. The order should be placed by the end of January, so we haven't got much time. They will be winter-weight sweaters with some type of crest (sewn in or screened). The cost should be less than \$30 with crest. There will also be a contest for a suitable crest (we can use the university's if we wish). Send orders or questions to dbowden, lekaram, or habennett via the Honeywell.

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math

NEWS

Welcome Back!

...back to the same old place if your regular; ...back to school for all those rich co-op slobs. Back to slavery in the deepest, darkest corners of the EMS, ...bending under the weight of books, tortured by unrelenting creators of the assignment and of the exam! Back to village and 'food' 'services', (and more turkey! ...hideous laughter - I'm on work term.)

Those of you that were here last term remember that we faithfully produced mathNEWS all but one week (thanks to the bun frying its internal organs) blowing our so-called budget by mid-October. To keep the great work up we need help from...

YOU

mathNEWS usually goes into production at 1900 hours Tuesday nights, MC3038, at which time photoneers, people to do lay-out work, and pseudo-artists are needed most. Even if you are not available Tuesdays, much can be done prior to production (saving us from Tuesday/Wednesday all-nighters), including ARTICLES! You can get involved even if you can only spare an hour or so a week. No experience necessary, (lack of same is considered an asset)!!

Joanne West
Editor

Watsfic

The Waterloo Science Fiction Club (Watsfic) will be holding its first meeting of the term on Wednesday, January 14th, in MC 5158 at 7 pm. At the meeting we will start our membership drive and will be arranging dates and times for future meetings (we currently plan on having meetings on January 21st and 28th in MC 5158 at a time to be decided). We will also be opening nominations for the election of the executive of the club. Executive positions are President, Secretary, Treasurer, and Secretary of War. All titles are self-explanatory except for the last: the Secretary of War arranges all the tournaments and wargaming events to be held during the term.

Membership costs 50 cents for the term, which will provide for coffee and doughnuts at meetings, and a movie night, among other things.

Watsfic, while a science fiction club, also includes many members interested in war games and role-playing games. We have a lending library of science fiction and fantasy as well as many types of games. We also put out a newsletter called WATSNEW. Submissions are welcome.

If any of this interests you, come to the first meeting or try the Watsfic office, MC 3036. Important news is usually posted on the door. We also have a Honeywell account, "watsfic", to which you can mail things.

CSC Flash! Welcome Back

I'm told that approximately half of the CS student body is in the co-op programme, so, for the benefit of those who missed the sinking of the yacht, the indictments, and the confiscation of the lion tamer hats, we proudly present a recap of the CSC's activities for the past four months, along with information on activities for this term.

The term started out with elections and a talk on the development of the Ada programming language by Paul Stachour. A few weeks later, Professor Dave Morgan (now working for Digital Equipment Corporation in Maynard, Mass.) presented a talk on networks for Teli-don. Next, Brad Templeton presented a talk on Mass Market Software and gave an impressive demonstration of the Atari 800 Personal Computer, with its superb colour graphics.

Two meetings on organizational issues followed: one on the future of the CS curriculum at UW, another on the future of computing facilities at the University. More on both of these meetings later.

The term wound up with a talk by John Sutherland, of CDC Mississauga, describing the CDC Cyber 205, the world's fastest commercially available computer (and also Made in Canada!).

Oh yes, the yacht sank on September 31st, with the indictments and confiscations occurring in the early morning hours of November 31st, under cover of darkness. As you can see, an eventful term.

One of the more far-reaching meetings dealt with curriculum issues. For more than three hours, thirty students and one Pure Math professor discussed the CS core courses. A report appeared in mathNEWS, and may still be found in plowley/mn/curric. (If you have a Honeywell account, simply thls plowley/mn/curric, otherwise come around to the CSC office for your FREE copy.) Three hard opinions resulted: the two-course (CS 370/371) numerical analysis requirement should be reduced to one course, CS 369 should be revamped to include more material on hardware, and material on software engineering, the social impact of CS, and the design of user interfaces should be included in the core. Many other subjects were covered. In particular, the first year courses were discussed at length. Though no unanimous opinions resulted, some people felt that debugging should be stressed more than it is and that pseudo-code should not be treated as a programming language with a strict syntax.

The Galumphing Gourmets

While seeking refuge from the atrocities perpetrated in the name of balanced diet by Food Services, this peripatetic group of gourmands has discovered a golconda among watering holes. This has caused us to desire to share our good fortune with others of our ilk, hence this (hopefully) first of an occasional series of restaurant reviews which will appear in these august pages as the spirits move us.

Cassidy's King Street North at Weber (across from Harvey's)

In addition to both kinds of music (Country and Western), this recycled eatery provides an opportunity for western-style dining at relatively reasonable prices. One can have a rather bulky salad with some extras for a modest five to seven dollars.

On three recent occasions we have visited this establishment with pleasing results. Enough persons were present on these rounds to have covered all of the items on the regular menu. A copy of the menu may be viewed in the CSC's food file. Prices currently run from a high of \$12.71 for A Pound of Cow (it really is!) to \$1.75 for Vegetable Varmits (raw veggies with side sauce). There is a total temptation to pig out and bankrupt yourself, but if you keep control of your proclivities to gourmandize, four people can eat well here for about \$35.00.

The salad bar can be had alone or with a meal. It is all you can eat either way. Our resident veggie recommends it highly, and states that the Vegetable Varmits are about the same thing, so you don't need both. Several of the items, for example Chicken Arms, come with a very nice BBQ sauce on the side. A comprehensive sample of flesh dishes may be had under the name Cassidy's Grill. This delightful platter consists of chicken arms, a pork chop, some ribs and a few super tater skins. This, and other main courses, is accompanied by a pot of baked beans and french fries.

The best beverage in the house is the icy cold Moo. We recommend the tomato juice. The place is licenced at the usual inflated prices, so a bar bill will considerably increase the tariff. We noticed on our most recent foray that the cigarette machine was broken, which can't be all bad.

The chili is Texas style, made with their baked beans, and not very spicy. You have been warned. The side order of Tater Skins, while tasty, is somewhat uneconomic. The Sufferin Succotash does.

The style of ice cream specialties (Baskin Robbins) runs to shared devices. Both the Terrible Tortoise and the Banana Bowl are served with four dishes in a help-yourself glass flower pot. The apple pie is so-so, and served with insipidly mild cheddar. None of us have dared to assay the Pararie Cowboy's Dream.

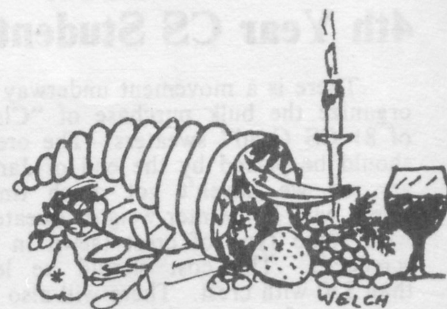
Service is good, not overattentive.

Rating: .2el bunnies

Rating system.

Ratings will be given to restaurants in this system based on the relative opinion of the authors. We do not intend to be objective, but subjective in a local sense. Restaurants rated at or above .2el bunnies are expected to be fruitful and multiply. The ratings are on a scale of zero to .3el bunnies: zero representing Food Services and .3el representing the best we can find. Ratings are based on the results of several ventures to the same place within a short span of time, with a diverse group of taste buds. Additional plants welcome.

jcwinterton et al.



Lord of the Disks

(loosely based on Tolkien's Lord of the Rings)

*Three Disks for the Stats-kings, with Data to Fidget,
Seven for the Pure-mathies (Modulus P),
Nine for the C.S. students doomed to Widjet,
One for the Dark Lord in his dark faculty
In the Land of Engies where the shadows lie,
One Disk to rule them all, One Disk to compile them,
One Disk to run them all and in CPU bind them
In the land of Engies where the shadows lie.*

Prologue - Concerning Mathobbits and Middle-loo

This series concerns mainly with Mathobbits who enjoy quiet and peaceful lives (and a good computing system) in a far away section of Middle-loo known to most other faculties as M&C Shire. Mathobbits are little people (similar to Frosh) and thus are smaller than DWarves and less stout. They are distantly related to the fair and gentle race, the Melves.

Mathobbits are timid creatures (like most Frosh) and are little known in more distinct parts of Middle-loo. Their inquisitive nature and enjoyment of good food and drink is second to none in all of Middle-loo; this is especially true in a notable settlement, the village **TWO**, where except for the bit about the food, all is true.

This story particularly concerns two Mathobbits, Frosho and his algebra tutor-roommate Bilboth. Bilboth had inherited the duties of trying to help young Frosho in First year algebra, and at the eventual beginning of this story, is about to graduate and leave M&C Shire.

Concerning the Finding of the Disk.

Bilboth in earlier times was in the company of the great Pure-mathie (wizard) Mathalf the Gray and thirteen DWarves. The companies' quest was treasure, a hoard greater than twenty work-terms at Defasco! The Quest was successful. On the return to the great Village **TWO**, the company was assailed by Marauding Enginorcs. The party scattered and Bilboth was lost deep beneath the

E.L.Hall in the black Enginorc mines. In the blackness, by pure luck Bilboth came upon a small floppy-disk lying on the floor of a tunnel. He picked it up and put it in his pocket.

On his way out of the E.L.Hall, he came upon a dark pool and therein lived a creature named Gollumeer. After an extended battle of wits, comprising of a series of mathematical riddles posed by each other for the other in which Bilboth came out victorious (the superiority of Mathies comes through), the Gollumeer attacked the Mathobbit. By some magical means, the Disk slipped into the portable disk drive (Sting) that Bilboth carried and Bilboth seemed to become the null string to the eyes of the Gollumeer. Thus it was that Bilboth escaped from E.L.Hall and returned home to the Village named **TWO**.

The story of the Gollumeer and the Disk was kept secret from all except the prying mind of the great Pure-mathie Mathalf and Bilboth's roommate-pupil Frosho.

Thus it was that the Disk came into the Company of the Mathobbit Frosho. Our story begins in a small room in a southern quad of the Village named **TWO**, where Bilboth plans his graduation celebrations

J.R.R.Mathie

Please comment and or request to continue and or cease writing "The Saga of the Disks"

Monologue -with Brad Templeton

Due to the mathNEWS policy of providing equal time for opposing views, the following column is printed, as there will surely be people with opposing views.

"It is probably a good idea to learn which end of a gun the bullets come out of before pulling the trigger."

The above line, like many maxims, is a statement of the obvious. But, like others, it is chosen to remind people to remember the obvious in situations where it is often forgotten. This week, **Monologue** returns with a discussion of culture and technology.

Today there is some worry about the dangerous situation in the third world. Some fear that, any day now, a group of terrorists will obtain a nuclear weapon and use it for their own ends. As terrorists have shown no qualms against using crimes such as kidnapping and murder to obtain publicity and their demands, it is reasonable to suspect that they may go all the way to threatening large numbers of people with nuclear devices. It is also feared that smaller countries, once ahold of nuclear technology, will use it in war against others. Many feel this is far more likely than a confrontation among superpowers such as NATO, the USSR and China.

Why is it that more danger is seen from small, less developed countries than is seen from nations with arsenals large enough to destroy the whole world? Why would small groups wish to use these weapons when superpowers try to avoid direct confrontation at any cost? I believe that the answer lies in the fact that these smaller groups are children with loaded guns. They, unlike us, have not had technology as a major factor in every facet of their culture for a long period of time. Some of them still don't have it.

Here in North America, as in the 'West' in general, we have a society that is integrated with technology to a much larger degree than anywhere else. This is largely true because we developed most of the world's high technology. If we had not been ready for it in some way, we could never have achieved it, for there is no other source. Most facets of our society are direct consequences of high technology and the increased standard of living it brings. Whether this is good or bad is not important, the fact remains that the effect is there. Every Canadian student here grew up in a world with TVs, cars, jet aircraft, appliances, mass education, skyscrapers and telephones. These are natural, run-of-the-mill things to us. We know their advantages and disadvantages like second nature; *our culture has been shaped by them.*

Due to this effect, we have learned a new set of morals. We still have religion, but it is hard to conceive of Canada or the U.S. engaging in a "Holy War" today. Even the Soviets are now rarely referred to as "Godless Communists" as was true in the past. We grew out of it. Mass communication and a free press have helped raise public outcry, allowing totalitarianism to be overthrown. With a more educated and informed populace, ideas of unfair discrimination, racism and sexism are gradually leaving our society. In this culture, more people are more productive, informed and free than have been at any other time in the past in any place. Due to these factors, countries the size of Canada and the U.S.A. can easily exist, where only city states were possible before. In our society, the more you consider somebody a neighbour, the less likely you are to want to throw a bomb on him.

An important thing to note is that these factors came in gradually, as did the technology that brought them about. Less than a century ago, at the time of the industrial revolution (technology was new to us then), we had our problems too. Workers were exploited ruthlessly, many died mining coal and in factories. Women and blacks were greatly oppressed. As time went by, our way of life changed tremendously. We became more liberal and less religious. The wealthy lost power through anti-trust laws and scaled taxation. This all took time, and generations had to grow up with these new ideas before they became fully integrated into the culture. Now, after having grown up in possession of the Bomb, with a greater awareness of the world and prophets of peace, we have a society that has a strong anti-war sentiment and cries for legislation on personal weapons. (We also have rising crime rates, but that's another story.)

Elsewhere in the world, these technological advances have come as gifts from the outside. The existing cultures were nurtured not by technology and a wealthy standard of living, but by ignorance, poverty and a hostile environment. Technology has not molded the society properly, so the society is not correctly equipped to handle advanced tools.

What can we do about this problem? How do we handle these technologically inexperienced children who will try and use the tools of "adults" because they are full sized people in rights and number? I really don't know, since the use of force would be morally incorrect in most people's views, and very little else would be effective. Perhaps a change of attitude among ourselves and the intellectuals of less advanced cultures is necessary. For some time, it has been assumed that any culture, simply by existing, has a *de facto* right to continued existence and protection of

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The chairman of the CS Curriculum Committee is very interested in considering these changes, though questions of money, manpower, and politics complicate matters. CS students are represented on the committee, so the CSC will form a group to prepare a set of opinions on the curriculum. If you're interested in participating in the curriculum review, just get in contact with us. We can be reached via userid csc on Honeywell or via intracampus mail.

Our second meeting concerned with administrative issues had Prof. Morven Gentleman, Prof. Paul Dirksen, and Prof. J. Wesley Graham discussing the next five years of computing at UW. If all goes to plan, there will be a multitude (**billions?**) of microcomputers on campus within five years, used for everything from teaching first year courses to research. In the interim, large minicomputers (such as the VAX) will probably be seen.

Elsewhere in this issue, I hope you'll find a reprint of the Curriculum article that appeared in the Yule issue of mathNEWS (unless it's been eaten by the rats; they've been crawling around in CSC's filespace ever since the yacht sank.)

Finally, the apparently exponential growth of CS text prices has us concerned. Some price increases are simply ridiculous, amounting to at least twice the general inflation rate. If people are interested, the CSC will circulate a petition to ask professors to have texts published by the University when possible, either as a set of notes or in the manner of the old Stat 230/231 texts. This may be happening already, as a set of notes has appeared for CS 370. However, the aforementioned Stats books are now published by Springer-Verlag, and have to be imported, with a considerable increase in cost.

We have a meeting planned for Thursday, January 22nd at 8:00 p.m., when we'll discuss the above points, have our termly elections and hear from Peter Fraser, of the Math Faculty Computing Facility, about the text editor FRED. The room is yet to be determined; see the posters that will appear.

We hope you'll have a good term, and that you'll make your life a tad more interesting by coming out to one of our meetings where you'll always find many helpful people and delicious doughnuts. Though nothing definite can be said yet, we have lined up funding for some famous speakers which we hope to bring you later in the term.

peter rowley

PLATTER SPATTER

Elvis Costello Taking Liberties



More George Thorogood and the Destroyers

More George Thorogood and the Destroyers — a rather unpretentious title, isn't it? But then George Thorogood isn't your average recording artist — every summer, he tells his record company to get lost, because he'd rather play baseball in the summer than make music. His new album (like all his others) is very much like the man himself — uncomplicated and unpretentious. People looking for 'deep meanings' in their music will find this boring; on the other hand, if you're an R&B freak, you'll love it — George never gets tired of playing good old 12-bar blues. The only change is that a session saxophone player does a few solos now and again, but that is not a distraction.

Interesting cuts: "One Way Ticket" is a Muddy Waters slow blues tune which stands out somewhat; "Just Can't Make It" and "Goodbye Baby" will pacify the slide guitar devotees; "House Of Blue Lights" is a good tune to dance yourself to exhaustion to; finally, "Kids From Philly" is a George Thorogood original (the songwriting credit is given to 'Jorge Thoroscum!').

A good album for your collection.

Dave

This album is not actually a new album as such — it's a collection of tracks on British singles and EP's which have not been released in North America as yet. Like all collections, this album contains some really superb songs, some OK but uninteresting ones and some real turkeys.

The good songs are generally the ones recorded early in Costello's career, such as "Chelsea" and "Tiny Steps". These songs are typical of Costello's style of a couple of years back: lots of drumming and an organ going full blast, with Costello singing in a voice as biting and sarcastic as his vocal cords can manage to produce. Other good tracks are "Clean Money" and "Night Rally". Also, there are many songs on this album which are not interesting in themselves, but are worth listening to just because of their variety. It is difficult to imagine Elvis singing a song called "My Funny Valentine" until you have listened to it! Other tracks, such as "Girls Talk" (previously recorded by Dave Edmunds) and "Wednesday Week" are OK but are nothing special. The real turkeys: "Stranger In The House", which would fit right into a Tammy Wynette album, pedal steel guitar and all (as you may have guessed, I don't like country music); and "Hoover Factory", which contains some of the worst lyrics I've ever heard.

It is clear from listening to songs such as "Getting Mighty Crowded" that Elvis has changed over the years — he used to sing lines such as

The radio is in the hands of such a lot of fools who try to anesthetize the way that you feel

(Radio Radio, from *This Year's Model*)

but now has a blurb written by a corporate vice-president on the back cover of his album. I guess this means that Elvis is now part of the System — will he be singing in supper clubs in five years?

dwtil

continued from page 4

its heritage. Because of this, South Africans want money and technology, while keeping Apartheid. Iranians and Iraqis want American and Soviet military devices while still reserving the right to wage 'Holy War' and have church control over the state. Early Indians wanted flintlocks but realized too late all the things that went with them. The simple fact is that many old traditions and ways of life were simply not made to survive the changes of advanced technology.

Our society, which invented the technology, had to change when it came along, so it seems unlikely that others should be able to preserve their old ways while taking the benefits. Groups that claim they are being 'Americanized' should realize the fact that a version of their culture that is fully integrated with technology would take generations to develop, and would probably end up looking similar to western culture in the long run anyway. They can either wait, or expect various and serious repercussions as they go through their period of being a child with a loaded gun.

LOST & FOUND CORNER

FOUND

One calculator, in PAC after the December CS140 final exam. Claim in MC5131.

Jane Gentleman
Dept. of Stats.



Hail the Log!

Long live $\int \frac{1}{x} dx$! On a recent jaunt I found myself surprised by a monumental insignia of this type and many others in the general vicinity of E2. Now, although it may be said by some that apathy is apathetic, I found that this remark could leave me not without emotion. I have been a U of W mathie for a time which seems to be much too long and I have often wondered why the non-engineering students of this institute could be so lifeless while just a couple of buildings towards the high school (WLU) the enginurds have had so much spirit.

I was beginning to think that I would finish my 4 years and get away from this place forever without raising havoc and without even once haunting the EngSoc. I thought that all mathies were insensate towards insidious events. But, to my heart-weakening surprise, the mathNEWS issues of late have shown an inkling of mathsochistic pride. To see a mathsochist rebellion against the belligerent enginurds would be a tremendous inoculation in my dying days as a U of W mathie (not to mention the interuniversal [whew! -typist] spirit which such a revolution would promote). I'm sure that the engineers would more than invite the challenge. We should get off our asses and defend our honour. We should never surrender. Whatever the cost may be. We can help the natural log reign supreme.

In closing, I'd like to suggest that we make 1981 the year of the mathsochist.

Insidiously yours,
A mathsochist forever
B.R. Brosa Jr.
4A Gen. Math

Chocolate?

York, England

He walked through the still night, the moon shimmering with an iridescent glow as if to spotlight his movements. His footsteps were imperceptible to all but the smallest creatures which inhabited the ground upon which he trod. Slowly, and with extreme caution, he picked the lock on the giant gates which rose up before him, beckoning, always beckoning.

He thought back to the day he first encountered the object of his craving. At three years old, when his mother introduced him to it, he knew it was calling him. He smiled, reminiscing, if only she could see him now, attempting the biggest coup of his career. After all, this wasn't just another Boots' - this was the big time.

The lock gave, the door creaked open eerily. As a precaution, he left it slightly ajar. Now, only one more door to go and he would have it. Yes, he could hear it now.

Old Bob had been night watchman at the plant for years now. He had seen a lot in his time. He walked cheerily down the path at the back of the plant. His retirement was almost upon him and he was happy. Little did he know what was in store for him.

The second door being successfully negotiated, he looked up and saw the sign. It lit up his heart; a burst of adrenalin surged through him. The bright orange background with the golden letters emblazoned on it, burnished and shimmering. He murmured them softly:

TERRY'S OF YORK

Manufacturers of Fine Chocolate

At last he had reached his ultimate goal. For the whole night, he could gorge himself on easter eggs, Neapolitans, Chocolate Oranges, and creams. Tonight he had nothing else to live for but this one final feast.

With a nervous excitement, he surveyed the rows of unwrapped chocolate eggs waiting for him, their smooth, luscious, brown exterior beckoning him to come closer. He picked up an egg. With a slight tap from his hand, the chocolate broke, making a familiar cracking sound. He could no longer control himself now, and in a frenzy stuffed the pieces into his mouth. He stopped. The object of his craving slowly transformed itself into an entity of its own in his mouth. It flowed and dissolved bringing him a feeling of almost sexual proportions. He stood transfixed as it oozed down his throat into his eagerly awaiting stomach. Never before had it been so good. Never.

Old Bob rounded the corner and stopped. He could have sworn he saw a shadow inside the plant. He walked over to the door. It was unlocked.

The chocolate from the first egg had now departed from his mouth. He had heard it calling before, but never as strongly as this. He walked towards a vat from which emanated a fragrance so captivating, so pure. He watched, fascinated by the swirling images of his innermost desires which he saw in the vat. A temperature gauge on a panel beside him read one hundred degrees Celsius...

Old Bob entered through the unlocked door. He noticed the strange emptiness which pervaded the once full rows of easter eggs. Something was definitely amiss. He entered the production room and saw the man standing by the vat.

"Oi, you!" he said. "You're not supposed to be here. Get away from that vat!"

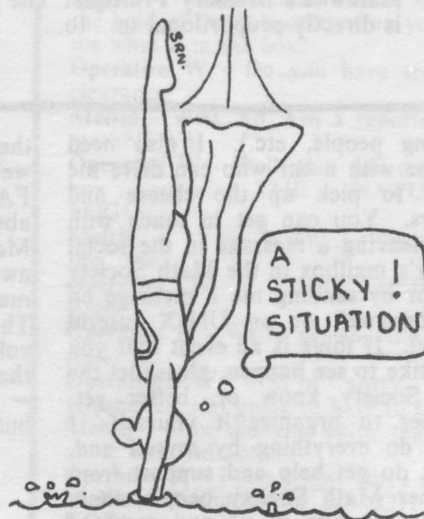
The man looked at him, a vacant look on his eyes which clearly indicated he was thinking of other things. "You'll never get me!" he shouted, and a hideous laugh erupted from his lips. Now he would really achieve his true goal. He had secretly wanted it to end this way. Before the watchman's very eyes he would disappear into the peaceful oblivion of his inner dreams. He stood poised on the edge of the vat, waiting, waiting.

"Watch yourself there," shouted Old Bob, "you're likely to fall."

"I shan't fall - I'll dive! And you'll never find me!" He stood looking into the vat as Old Bob closed in on him. It was destined to end this way, he thought, and dove in.

One hundred degrees Celsius is the temperature of boiling water.

Alan Munn



CS Curriculum News

In the closing weeks of last term, the CS Curriculum Committee met twice. It dealt with a variety of topics, the most important of which was CS 250. CS 250 did not turn out very well last term, as pointed out by Prof. Benton Leong in a memo distributed to the committee. Problems with WIDJET (e.g. losing the ends of large files coming back from the 370) and WATIAC (e.g. consuming incredible amounts of resources) conspired to bog things down very effectively. The committee is looking to microcomputers for the eventual solution of the resource problem. It seems that micro's would also be used for many of the first and second year courses. Still, there are problems to be worked out: finding the necessary funding is the biggest, followed immediately by finding a manufacturer to build the single-board MC6809-based computers envisaged by the Computer Systems Group.

A short term solution had to be found. The committee pondered the question and came up with two possibilities: rewrite WATIAC in WSL (the Waterloo Systems Language), giving it the ability to use libraries stored on the 370, or use another machine simulator. The former option would (it is hoped) make WATIAC run faster and reduce the amount of traffic between WIDJET and the 370. The latter option, which would make use of one of the 360 simulators available (such as SPASM) would be much cheaper and faster to implement, but would change the course considerably. Both possibilities are still being explored.

In other news, the idea of awarding extra course credit for "hard" CS courses (e.g. CS 452, CS 444, CS 488) was turned down, primarily upon the recommendations of Prof's John Beatty and Kelly Booth who feared a bout of course inflation. The debate brought up an interesting question, though: **should CS have lab courses, much like the sciences?**

Finally, some of the reforms raised by the CSC's meeting on the curriculum were presented to the committee, on an informal basis, for consideration. They include modification of CS 369 to stress hardware instead of switching theory, deletion of CS 371 from the core, and inclusion of more "software engineering" material in CS 240. The committee is moving on these matters and we can expect to see some concrete changes voted on in the new year. Should you wish to comment on the changes, or on any part of the curriculum, mail to the Computer Science Club, via TSS (userid csc) or intracampus mail (CSC, MC 3037).

peter rowley

Social Director's Report

There was to have been a U of W Math Winter '81 T-Shirt Pub on Wednesday, January 7th to hopefully get the term and the new year off to a good start. Unfortunately, so few people volunteered to help out that it was impossible for it to be held and I had to cancel it. (So much for the good start!!!) Cancelling the event was something I really did not want to do — especially after the amount of work already put into the affair — but I had no choice. So unless YOU (and you and you ...) don't mind doing without math pubs this term, I suggest you seriously consider helping out for an hour when one is held. (And remember — you get in free if you help out!)

The UW Math Winter '81 T-Shirts featuring Ian! Allen's prize-winning design are now on sale in the Math Society. They are subsidized by MathSoc and cost only \$4. This is a good deal so you should buy one. The t-shirts are dark brown and the inking in the design is red and yellow.

The next event I envisage is a thigh-high wine&cheese party for the end of January. The entrance fee to the pub is \$2.50 for math students and \$3.00 for others. If you wear a skirt which is x inches above the knee, you get $x \times 20\text{¢}$ off of the standard entrance fee. If you are a math student wearing a skirt which is 12 or more inches above the knee, you get in free. If you are a non-math student wearing a skirt which is 15 or more inches above the knee, you get in free (*if you're not arrested first -typist*). Wearing shorts which are y inches above the knee, you get $y \times 15\text{¢}$ off of the standard entrance fee. If you are a math student wearing shorts which are 15 or more inches above the knee, you get in free; a non-math student wearing shorts which are 20 or more inches above the knee gets in free.

Once you get in, the wine and the munchies (mainly cheese & crackers) are all free. There will be a DJ to provide music for dancing and there will be a few spot dances. There will also be prizes for (1) the person wearing a skirt which is the most number of inches above the knee and (2) the person wearing shorts which are the most number of inches above the knee.

Sounds like fun? Well, I think it does but it will remain only a figment of my imagination unless I get some active support. The tentative date for the wine&cheese party is Thursday, January 29th. People are needed to set up and clean up and to help out at the door (measuring, collecting money,

Young Frank Einstein's Weird Stuff things that should never be printed

Right! Well. It's time to spin off all those crazy tidbits of ruse I've come across this week. Now you can see how Frank really thinks most of the time! First, have you noticed that everyone and his PET is reading *Godel, Escher, Bach* all of a sudden? Like, it's hip! To read this book, I believe, is recursively self-gratifying. Which brings to mind a sort of mental masturbation on which all eclectia is based, but to heck with that!

On to the next item. Screw things about K-W. Why *do* King and Weber Streets intersect four times? Why is Ellis Crescent straight from end to end? Why is Lancaster Street divided into East and West parts when it in fact runs almost perfectly north-south? Closer to campus, why is every single one of the traffic light standards at University & Seagram keeling over? Why is there a man-made valley between the PAC and the Ring Road, with small, steep and treacherous stairs on three sides, when there needn't be any? To make a blank & garish structure even blander & garisher? Why is ES2 red, fer Chrissakes? Why does Greg Bezoff never go away? Why don't I ever go away??

Now here's a puzzler. This is a transfer, right? Then why isn't it transferable? Not only does that sound strange to the ear, but it also disallows you from giving it to the driver of the second bus. Oh well, such is life; what can you expect from a transit system which charges 25% more for its monthly passes than Ottawa, which has 10 times as many routes for three times the population??

Yet 'nother interesting aspect of living in Waterloo is the chance to observe the curious habits of the city's horticulturalists. This must be the only city in the world which has so unanimously accepted the shopping cart as a landscaping item. It's common to see houses, usu. brothels, student housing or some such thing, with one, two or even three of them, in various recumbent positions, decorating the lawn. They do add a 'high-tech' appearance (the new chic, incidentally, in house decoration) to the place, due to their metallic geometry. In honour of this grand institution, I'd like to propose (*this is serious!*) a mathNEWS Shopping Cart Shopping Spree Contest. What we want is a 3 by 5 print of your favourite shopping cart still life portrait. We'd prefer the picture to be unposed, but if you feel moved by inspiration, you might create an ironic and unique shot. Please try not to be destructive; there are enough carts in this region's lakes and rivers as it stands! (N.B.: the granddaddy of them all when it comes to shopping cart art is a cartoon drawn by Bill Eddy for a Honeywell wall calendar during the sixties; it portrays a man at a lectern speaking about the utter desolation of the proposed lunar landing site, while on the screen behind him is a slide of a moonscape with a shopping cart in the corner. If you can find it, you'll love it.) The prize? *Oh yes, the prize!* We are offering a prize for the photo which is judged by a panel of experts (us) to be the best: a five-second shopping spree at Zehrs Waterloo Square, from whence come most wild shopping carts, starting in the toothpick section. The rules are basically that you may put as many non-fragile items as you can grab in your cart during the five seconds, without throwing them, and we will foot the bill! It's exciting! And there may be other prizes too. We'll see.

It's getting late, time to go to bed and say your prayers. As you lie awake and hold yourself so tight, think about this one from the *Ottawa Citizen*:

Hurewitz's Memory Principle: The probability of forgetting something is directly proportional to... to...

This Transfer is NOT a STOPOVER and is NOT TRANSFERABLE and only good at Transfer Points.

Chener Transit

Young Frank Einstein

stamping people, etc.). I also need someone with a car who can drive me around to pick up the cheese and crackers. You can get in touch with me by leaving a message in the social director's mailbox in the Math Society office or by sending me a message on the Honeywell or on UNIX (userid mjshaw). If there is an event that you would like to see happen, please let the Math Society know or, better yet, volunteer to organize it yourself. I cannot do everything by myself and, while I do get help and support from the other Math Society people, there are just too few of us and most of

them are busy with other things as well (e.g. mathNEWS, C&D, Antical, FASS). I keep hearing and reading about complaints and criticisms of the Math Society. I would like you to be aware that it is not your dollars that make Math Society services available. They are available because people volunteer and give (more generously than they can afford) of their time. So — if you want to bitch — go ahead — but I think you've got a lot of nerve.

Marnie Juel Shaw

West vs East

Over the past couple of months the topic of western separatism has had moderately wide coverage in the media. The question naturally arises as to whether or not this movement is a serious threat to Canadian unity. But more fundamental questions (which are ultimately more important) arise as to the root causes of the movement and their effect on Canada and its economy.

The western separatist movement is basically different from that in Quebec. The French separatist movement is culturally based. Economically Quebec has much in common with Ontario. In the west, however, the cultural heritage is essentially similar to that of the rest of English-speaking Canada. But economically the interests of the west have seldom coincided with the interests of the population centers of central Canada, population centers which, controlling votes, have controlled federal policy. Over the years these policies (e.g. high tariffs on manufactured goods) have instilled in the west, with some justification, the feeling that the rich manufacturing centers of central Canada were remaining rich at the expense of the west.

But now economic stagnation in central Canada and the increase in resource revenues have led to a shift in economic power. As of yet, however, there has been insufficient change in the population patterns to affect the concentration of political power. Thus western alienation (certainly nothing new) is now able to express itself in a new and serious manner.

By this I do not mean separatism. The western separatist movement makes good press and thus receives disproportionate coverage. As of yet the movement is probably best considered as an indication of the strengthening of western polarization rather than as a serious threat to Canadian unity. But if current trends continue, this movement could develop in a few years into an important force.

Much more damaging to Canada is the use of oil as a weapon in the current round of Canada's depressingly familiar Federal-Provincial power struggle. Threatened cutbacks in conventional production are serious enough. But of crucial importance are delays in the development of tar sands and heavy oil production. These sources are capable of supplying much needed oil in the energy crunch of the next twenty years. Now even the ludicrously insufficient efforts to develop these have been halted by the squabbles.

I am a centralist and in most cases support the view that the federal government should not relinquish powers to the provinces. I believe, therefore, that the federal government should retain the final power in oil pricing. But this power should be used responsibly and reasonably. The world market value of oil may bear little relation to the cost of oil production, but it is still a market price and accurately reflects the demand for oil. To insist that the west produce and sell oil at half the world price, using an argument that inefficient central Canadian industry will not be competitive without heavily subsidized oil prices, seems to me ridiculous. Alberta's proposed pricing scheme is much more reasonable. Also, the federal government's attempts to increase its share of oil revenues cannot be justified.

Nor am I impressed with the federal government's handling of the situation. Negotiations can hardly be considered to have been carried out in a non-confrontational manner. Trudeau's attitude can be described at best as having a distressing lack of tact, and at worst (and probably more accurately) as arrogant and inflammatory. Many situations call for a conciliatory attitude but this seems completely foreign to our Prime Minister.

The present trends in Canada are extremely divisive. Evidence of western alienation is becoming clearer and more direct. The stage is set for a full-scale battle between the economic power of the west and the political power of the center, a battle which will harm all. It is time for some give and take. For too long central Canada has taken at the expense of the west. It is time to give a little

William Hughes

Attack!

The following is an exclusive interview, obtained by mathNEWS star reporter Melvin Hidsnoffer, aboard the command craft of a special committee of the newly formed crack units of Mathematics students that has suddenly appeared on our campus.

The identity of our subject cannot be revealed, due to heavy censoring by authorities higher than ourselves.

Melvin - Excuse me, Sir. You look like you are in charge. Can you tell me where we are going?

Operative W - I'm sorry. I can't say.

Melvin - Does that mean that you are not a member of the math Subversive Operations Committee?

Operative W - Of what?

Melvin - You know...mathSOC.

Operative W - Oh.Uh....we don't talk about them. Period.

Melvin - Is it true that M15, Canada's Special Service Force, Britain's Special Air Service, and the U.S. Secret Service, were all trained by the math Subversive Operations Committee?

Operative W - No comment.

Melvin - I see a titanium alloy box in the hold of the helicopter. Can you tell me what is in the box?

Operative W - Do you have security clearance?

Melvin - Well...no. I'm a reporter for mathNEWS.

Operative W - Well, that will do. The box contains...THE NATURAL LOG!

Melvin - You mean...I mean, is this...the...

Operative W - ...math ACTION. Right.

Operative Z - We're nearing the drop zone, W.

Operative W - I'm sorry, Mr. Hidsnoffer. I'm going to have to go.

Melvin - How did you know that my name was Hidsnoffer?

Operative W - I just know, that's all.

Melvin - Perhaps you can...OH MY GOD!

At this point, readers, the tape stopped. We can only guess what happened. It seems that the crack commando unit had just landed in front of the Engineering block. The tape started up again a few moments later.

Melvin - This is terrible...all I see is engineers...hundreds of them... thousands of them...they're so...UGLY!! No..wait...I..I can see the mathies now. They are carrying the log and...OH MY GOD!! They are marching straight towards the engineers...They see them and they're not turning back. Ladies and Gentlemen, this is truly a display of incredible courage and solidarity.They...they don't have a chance. Who says that Math is dead? Never in my life have I seen stronger evidence that Math Lives! Oh, PRAISE TO THE LOG!!! Well now it looks like it's all over...I...I can see Math...it... it looks like all of them have survived...many engineers were not so lucky... or maybe they were already dead...I don't know...don't care...just...BUT WAIT!! Where's the LOG? Let me see if I can talk once again with the leaders as they return to the command copter....

Operative X - Excuse me, I must get on board.

Melvin - Tell me...can you shed some light on what has just happened here?

Operative Z - No he can't. This man must be rushed to a doctor. He can't talk right now. Excuse me.

Melvin - Oh..how about you sir... can you...good heavens, what happened to your head.

Operative X - It's from bolt cutters...just a scratch.

Melvin - BOLT CUTTERS! You mean they took...they have...

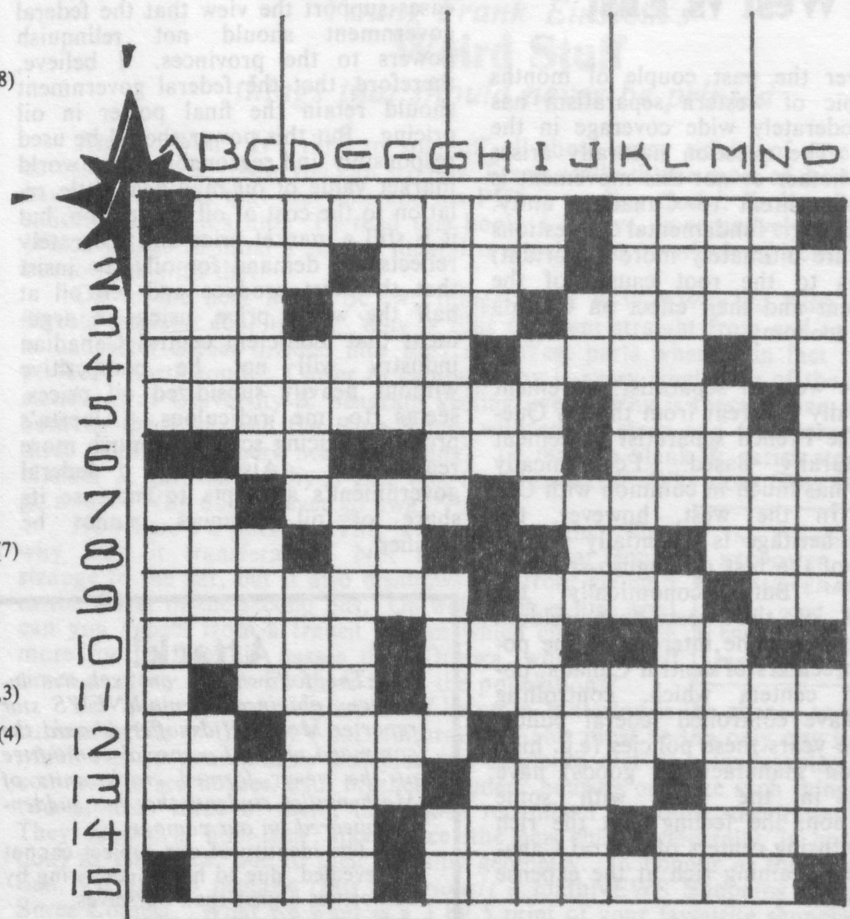
Operative Z - The operation was a success.

Melvin - But they...they got the LOG! How can you call that a SUCCESS?!!

Operative Z - That would be telling...

ACROSS

- 1b TV Game allows computer access (8)
 1k A man, a , a canal, Panama! (4)
 2a Sea eagle makes money (4)
 2f Newts (4)
 2k Robby (5)
 3a Vitamin (abbr) (3)
 3e Of the magi to last (4)
 3j Dog (6)
 4a Many Joannes (7)
 4i Parasites (4)
 4n Musical note (2)
 5a Tape or musical (9)
 5k Association for 11G (3)
 6c Street saint (2)
 6g For two (3)
 6k Saged impression was French (5)
 7a Iron (2)
 7d Soup work (4)
 7i PET not commodore (7)
 8a Cleo's snake (3)
 8e Article (2)
 8j Biblical city (2)
 8m Unhappy ads (3)
 9a He has equal vote as everyone else (7)
 9i Treble (4)
 9n One (Scot.) (2)
 10a Redhaired Yookooohoo (5)
 10g (Un)Lucky Munchkin (3)
 10l For example (2)
 11c Got switched (3)
 11g New mobils become a movement (6,3)
 12a Egypt (2)
 12d "Batch job", Tom said crunchingly (4)
 12i Shatner margarine (7)
 13a Swinging walk (6)
 13i Tired jean (4)
 13m Non Standard Terminal (3)
 14a 2nd Level AD&D spell (5)
 14g "This!" dit Tom succinctly (4)
 14l Inspired thought (4)
 15b Son of Adam (4)
 15g Doctor's affairs are indoors (8)



DOWN

- a2 When or for (4)
 a7 Justice (8)
 b1 Deadly sin (5)
 b7 Latin to be (4)
 b12 Guys and slag (4)
 c1 Actions in cast almost frantics (6)
 c8 ...and you didn't know it (4)
 c13 Perceive with the eyes (3)
 d1 Direction of c13 (2)
 d4 Dorothy's dog (4)
 d9 Pulling wool over the croc (7)
 e3 Half of Gorgon (3)
 e7 Two Graphs (9)
 f1 Strange what I drew (5)
 f7 Numera? (3)
 f12 Unusual Yabbering (2)
 g1 Typographical insertions (7)
 g9 Down or Boy's (4)
 g14 Cryptic Inscription (2)
 h1 Really Terrible Trick (3)
 h5 Again (comb. form.) (2)
 h10 Sephine or anne West (2)
 h13 Mightier than sword (3)
 i1 Data Structure (2)
 i4 Law exam (4)
 i9 Powder puff is small (7)
 j3 Goes both ways (2)
 j7 Three fifths of RULER (3)
 j11 And Bert (5)
 k1 Pascal subroutine (9)
 k11 Boolean operator (3)
 l1 What happened to canal water when lead dumped (7)
 l9 First Enigmatic System Macro (4)
 l14 Any current fad (2)
 m1 Absolute (3)
 m5 Sage is getting older (4)
 m10 Witch of the South (6)
 n1 When born is the king of Israel (4)
 n6 Fonz marks? (4)
 n11 Insufferable Stupid Silly Enigmatic Letters (5)
 o2 Sweat it! (8)
 o11 "It's Greek to me", Tom said bitterly (3)

GRIDWORD
 THE MOTION PICTURE

the gridword
 returns

We have revived a long tradition of mathNEWS, "the Gridword Contest"! The owner of the correct gridword solution submitted to mathNEWS c/o MathSoc MC3038 will win a T-shirt.

Your solution to this week's gridword should be submitted to mathNEWS by 4:30pm Tuesday the 20th. Be sure to write your name and phone number somewhere on this page.

If you are a winner, you will be notified and must show up at a mathNEWS production meeting with your ID card (or have a friend bring it). Production meetings are Tuesdays 7pm - 2am (3,4,5,...am?) in MC3038. Ask for the editor. Winners are only entitled to 1 T-shirt per term (to keep things fair). If you do win more than once, you will receive mention and your name in print! (and buttons when we make them). The submitter of the second correct solution for the week will, in this case, win the T-shirt.

JANUARY

FRIDAY	SATURDAY	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
16 ADD/CHANGE WINTER COURSES ENDS TODAY FED FLICK: EXORCIST	17	18	19 RESUMES FOR CO-OP STUDENTS LAST DAY	20 mathNEWS PRODUCTION NIGHT 7 pm MC 3038	21 CINEMA GRATIS GAY RIDER WATSFIC MEETING PLANNED MC 5158	22 CSC MEETING 8 PM WATCH FOR POSTERS...
23 FED FLICK: RICHARD PRYOR (LIVE IN CONCERT)	24	25	26	27 mathNEWS PRODUCTION NIGHT 7 pm MC 3038	28 CINEMA GRATIS EXODUS WATSFIC MEETING PLANNED MC 5158	29
30 FED FLICK: THE DEER HUNTER	31	1 FEBRUARY BEGINS !!	2	3	4 CINEMA GRATIS OUTRAGEOUS FASSIFIED INFORMATION AT THE THEATRE OF THE ARTS	5
6 FASSIFIED INFORMATION AT THE THEATRE OF THE ARTS	7	8	9	10 mathNEWS PRODUCTION NIGHT 7 pm MC 3038	11 CINEMA GRATIS CASABLANCA	12 FRIDAY THE 13 th COMING

DUCHESS Word Search

I E T H E M U S R E V E N
 Q V D U O Y E A A O H A D
 I A G R E E S I E L T N S
 F H A R M I I D P A I A N
 O L E D M O W M P T W K E
 O W E P U O R P A H V E E
 S B L S U C E E A G T Y B
 E Y T L R A H T V I I U A
 C U D A R U T E U M U N P
 I S R E H T O Q S O D S E
 L O D E H T N Y E S Y E B
 A T I A D V E N T U R E S
 W O N D E R L A N D O N R

Find 'all' the words in the following quote. All words are distinct (not contained within another). Ignore duplicate words and punctuation.

Quote:

Alice's Adventures in Wonderland. 'I quite agree with you,' said the Duchess; 'and the moral of that is - "Be what you would seem to be" - or, if you'd like it put more simply - "Never imagine yourself not to be otherwise than what it might appear to others that what you were or might have been was not otherwise than what you had been would have appeared to them to be otherwise."'

/rwm

Comment

I am glad to see that security and administration have seen it necessary to have vehicles towed away during the first week of lectures as opposed to allowing students, particularly Village students, to have one week to move in and return their vehicles to home. This show of consideration seems appropriate as it comes from those who are supposed to be helpful to the students.

Sincerely,
Unparked Village Resident

P.S. Thank you, **Active Towing**, for taking me for a ride.

talk about crooked lines (typewriters dying...bye for now! 1:52:37 wed
morn^{ing} ...jo

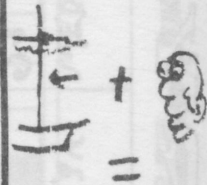
The Student Advisory Council to the Dep't Of Co-ordination & Placement

The Department of Co-ordination and Placement provides a service to students in co-ordinating the work employment of undergraduate University of Waterloo students in co-op programmes.

It is well known that in this situation where one organization provides a service to another, those receiving the service can only be best provided for when there is an effective mechanism for which feedback and advice can be shared between the two groups. The Student Advisory Council to the Department of Co-ordination and Placement meeting with the Department of Co-ordination and Placement provides this communication link.

Anyone interested in sitting on the Student Advisory Council should contact Duncan Murdoch in the Math Society office before January 20th.

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Hi! Welcome back!! In until a few hours ago, this issue looked like

(like) it was going to be a four pager...then the eucher game ended and people slowly stopped muttering "pick it up". * / (i found the shift key, finally) Help tonight comes from (take that properly jan) have welbourn(gridword, calendar), JJLong(layout) peter rowley(csc, verifying photoning, running around) radall(w.s.) JRRMathies (lord of the disks), gray(typing, eucher, photon, etc), dbowden(gad sw

eaters), john place(typist, photon fixer), mcf dinner group(guy, ashok, bill, kevin jcw, brad, etc) /**KEVIN CREWS (new - layout, graphics), also **SRNEELY (new too - graphics superbe), will hughes(w vs e, photonier extrodinaire), rohan (photoning, preview), tracy tims(lock fiend(, Rob Byrd (new stuff!), someone from watsfic, d murdoch(advisory), marnie shaw(social that wasn't), Andrew Welch(hot chocolate, typist, preview), Wross Brown(tech ed- preveiwng, banners, YEE, nontransferable transfer -real), alan munn (chocolate??xo), brad templeton(monologue), dwtill(record review, how's t.o. dave?), jane gentleman-stats(lost&found), brbrosa(recycled letter), sincere village resident, operatives W and Z(box painting-go look at the ugly thing in the hall on the third floor!?), tracy allen (crooked lines-even with a lined paper!))...

WILL BE DOWN UNTIL FURTHER NOTICE
(AT LEAST 1 WEEK.)

BURBORAFF