

mathNEWS

This Easter Edition of mathNEWS is dedicated to Bieberbach, his conjecture, the guy who proved it, anyone else working on or with it, the country music station that told our source about it, our only source who listens to country music, and her sister (who may or may not exist.)

Warning: this imaginary issue is complex but contains nothing real.

Volume 36 Number 2

Sept. 28 1984

WatNext?

On Monday Sept. 24th the **Computers in Education** committee of the Engineering faculty kicked off its lunchtime seminar series with *WatNext - A Perspective on Computing at Waterloo*, with J. Wes Graham. Dr. Graham is the Dean of Computing, and has played an important role in nearly all computing developments at Waterloo over the past 25 years. When he talks, people tend to listen ...

To slake curiosities, Graham began by answering "We don't know for sure" to the question "What next?" All of the innovations (eg. WATFOR, WIDJET, etc.) in the past have been a response to the demand for faster, cheaper, more powerful, or more convenient ways to use computers. Graham remarked, "Most developments ... have been student-instigated. From day one, the students have wanted far more computing than we can produce."

Dr. Graham illustrated this by giving a short history of the student-used systems here. (This story is familiar to many of us.) From the time the touted \$2 million computer arrived in 1963 to the advent of timesharing terminals in the early 1970's nearly all programs were written in WATFOR and all jobs were entered on punched cards. WIDJET was a stop-gap measure to replace physical queues, of students lining up at a card reader, with electronic queues. At the latest stage, much of the undergraduate computing load has been moved to personal computers, allowing WIDJET to die quietly last Fall.

Following this trend into the future, Graham said that ideally each student (regardless of faculty) would have a functional, powerful, battery-driven portable computer that you could carry around the campus and plug it into "the network" anywhere. Students wouldn't think of a personal computer as a computer but rather as a tool, part of their working environment. Although Graham regards this "a dream" now, it is conceivable by the 1990's. The technological barriers are being extended as we speak, and the networking issues are being addressed by systems like JANET, the MicroNetwork, and WatStar. However, Graham added that the network problem has not yet been effectively solved.

The seminar ended with questions about some of the current projects under Graham's purview. Waterloo's involvement in the New Oxford English Dictionary (NOED) involves taking the one billion characters of the NOED and managing it as an on-line data base. The techniques used on that project will, Graham hopes, also help with other projects that involve huge data bases. When asked about the Apple Consortium deal (an agreement between Apple Computer and a number of American universities to provide cheap Macs for students), Graham explained that in such a deal the universities have to not only subsidize the cost of each computer sold but also have to entrench the Macintosh of in their curriculum to guarantee its use. Underlying "catches" like these made the Apple offer unpalatable to many people at Waterloo. When asked if undergraduates would see much of the new Digital Equipment hardware, Graham expected that within a year students would be "guinea pigs" for new systems under development on the DEC Pros, Rainbows and microVAXes. Regarding the ICR building, Graham said that the design would be selected next week and that excavation would start early in the Winter term.

Tom Ivey

These seminars take place in CPH 3985 at 12:30 on nine consecutive Mondays this term.

Graduation Photos

The Math Society is presently working with Forde Studios of Kitchener to arrange graduation photo sessions here in the Math and Computer Building later on this term, as well as photo sessions in the spring. The Fall sessions will begin on Monday Oct. 22nd, the Spring sessions begin on Monday Jan. 28, 1985. For the Fall session, proofs will be available for pick-up by Wednesday Nov. 7.

Please sign up for your sitting time as soon as possible. Lists and more information are available in the MathSoc Office MC3038.

movieNEWS

My reference material for this column may not be extraordinary but it will usually prove to be satisfactory. It is unfortunate, however, that i (you can say what you like about the small 'i' but it's my trademark and follows me wherever i go) must begin my first real movieNEWS article by saying that i know absolutely nothing about **Rich And Strange**, (Cinema Gratis, Campus Center, Wed Oct. 3 9:30). I may not even get a chance to see it so i would certainly be pleased if someone who does see it tells me about it (via the mathNEWS box).

I can tell you a little about **Terms Of Endearment**, (Fed Flicks, AL 116, 8pm & 10:30 tonight and Sat., 8pm Sun). This was a big award winner last year, directed by James L. Brooks (i'm not familiar with anything else he has done if he has done anything else), with Shirley Maclaine, Debra Winger and a charming Jack Nicholson. It's a tear jerker and a good movie but i don't consider it to be worth of the praise it received. The movie had too much reality, too much slice-of-life for my tastes, it never stopped to say it was a movie. I largely dislike reality and so i prefer not to see it in the theatres. I do recommend seeing it though, and i will probably listen to my own recommendation.

Fine Arts 246 has the best movie of the week with **The Seventh Seal**, (FINE246, PHY245, 2:30 & 7pm Tues Oct. 2). This is an older (1956) Ingmar Bergman film with complex themes of religion, death, pain and joy woven into the story of a knight returning from the crusades. It is a fascinating film and a memorable experience and it bears no resemblance to reality. This is worth seeing more than once and i recommend it to all. I ask, however, that you respect the rest of the audience as this is a fine arts course to them.

The trivia contest will be starting soon. October 5 is the deadline for pre-contest information submissions - ten favorite movies (any order) and five personalities (any type and they need not all be different; i.e. if you like five actresses above and beyond anyone else connected with movies that's what i want to know.)

Here quickly is my own list:

- 1) The Stalker (USSR 1979)
- 2) Casablanca
- 3) Citizen Kane
- 4) Wuthering Heights
- 5) The Woman Next Door (FR 1981)
- 6) Koyaanisqatsi (US 1983)
- 7) The Adventures Of Robin Hood
- 8) North By Northwest
- 9) The Maltese Falcon
- 10) Sophie's Choice

- 1) Alfred Hitchcock
- 2) Orson Welles
- 3) Humphrey Bogart
- 4) Charlie Chaplin
- 5) Lillian Gish

Remember - all submissions to mathNEWS should be placed in our mailbox opposite the third floor smoking lounge.

The CSC Open

Computer Othello Tournament

When: November 10, 1984.

Where: Somewhere in the Math & Computer building. Exact rooms will depend on the entries received.

Who: Anyone. Includes students at UW, as well as off-campus entrants.

Why: To encourage programming for purposes other than completing CS assignments.

The competition is open to all entrants from anywhere in Known Space. The entrant must have written a non-commercial computer version of the game of Othello[®], but he may enter up to three *different* programs in the tournament. The games may be run on any computer that (a) the competitor can provide (i.e. transport to or dial up from the MC building) or (b) that is available for use to the CSC. These latter computers include the 'bun, VAX/UNIX (4.2 BSD) and IBM 4341 (VM/CMS). The programs may be written in any language, or implemented in hardware if so desired.

The competition will be organized as a five round Swiss-system tournament, with each program is limited to a maximum of 30 minutes/game. Chess clocks will be used to time the moves. Any time consumed by machine or program failures will be attributed to the to the competitor's time clock, unless permission is granted by the organizers to stop the game. All programs must use the standard algebraic notation for moves, with *A1* being the bottom left corner and *H8* the top right corner of the board. Any game found making an illegal move will be deemed to have lost that game by the count of 64-0.

Prizes will be provided by Computerland of Waterloo in the form of gift certificates redeemable in any merchandise, as well as by possibly other companies. The Computer Science Club will provide trophies to the top three finishers, and the winner's name will be engraved on a permanent trophy that will stay in the possession of the CSC.

Entry fee will be \$5.00 for CSC members and \$6.00 for others. In addition, registration later than November 3rd, 1984, will cause a late entrance fee of \$2.00 to be imposed. The entry of multiple programs implies the charging of multiple entry fees.

More information and entry forms are available from:

Computer Science Club
University of Waterloo
200 University Avenue West
Waterloo, Ontario
N2L 3G1 Canada

or, by electronic mail:

{allegra,clyde,decvax,ihnp4,utzoo}@watmath!csc

A Prayer on the Selection of the Design for the ICR Building

O great Cthulhu of the upper echelons of University Administration whose ways are largely unknown to us mundane folk,

Grant us an edifice that is not an eyesore, that resembleth not a grey sand castle left out in the rain,

Upon the exterior walls of which we may hang banners and trusting in our own righteousness prevent nasty engineers from scaling those same walls so to desecrate the Pink Tie which we hold dear in our hearts and cardigans,

And in which we may find a Library of vast and quiet expanse, that resembleth not a warehouse with shelves and tables, nor resembleth a high prison-place with narrow unyielding panes,

And through which, in unity with Faculty and Administration, we may pass into a new and great parking lot, and leave this place ensconced upon our Harley-Davidsons and clutching our degrees.

Amen

Car Rally Tomorrow

Don't forget the MathSoc Car Rally tomorrow (Sat.) starting at noon. It will be about two and a half hours of driving all over K-W and outskirts following silly instructions and looking for silly things. There are prizes, a large trophy and a barbecue afterwards for the survivors. Fifty cents buys you two hotdogs and a pop. Any number can ride in a car but only two enter.

Sign up in the MathSoc office today or show up tomorrow at noon in parking lot A.

Math Grad Ball '85

The Math Grad Ball has been tentatively set for Saturday March 23, 1985. At present the Math Society has few volunteers to organize the event. Because there are a number of activities to co-ordinate, it is important to start working on MGB '85 early. If you are interested in being involved, come to the MathSoc Office (MC 3038) and fill out an "Information Sheet". You can do a little; you can do a lot! Every bit helps.

MathSoc also has a larger concern. Just how well attended will Math Grad Ball '85 be? Because there are so few 4th year students involved in MathSoc (three vacant 4th year Rep seats on MathSoc Council), it is hard to get a good feel for the desire for an MGB. Please give us feedback! Volunteer today!

LookAhead

A glance at upcoming events

Math Events
Sept. 29 MathSoc Car Rally
Oct. 5 Oktoberfest
Fed Flicks
Cinema Grails
See movieNEWS column
mathNEWS dates
Sept. 30: mathNEWS articles deadline
Oct. 1: mathNEWS production night, MC3038.
Oct. 5: Next mathNEWS available
UW Arts Centre
Call Humanities Theatre Box Office at 885-4280 for more info
Sept. 29 <i>Royal Canadian Air Farce</i>
DCS Courses
<i>Free! One to three one-hour lectures; contact DCS to register.</i>
Oct. 9,10,12 CMS Part II
Sept. 24,26,27 Introduction to GML
Oct. 1,2,4 Introduction to APL
Oct. 1,3,5 Introductory Unix
For Co-ops Only
Sept. 28 Want Ads come out!
Oct. 1 Job Applications due.
Oct. 2 Late postings begin.
Oct. 22 Interviews Start!
Nov. 8 Pick up job ranking forms.
Nov. 9 Interviews end.
Nov. 9 Ranking forms due.

Feedback

Not the Proof of the Week

Many of you are perhaps wondering why we published a "proof of the week" last issue. (Indeed, I wonder myself ...) It seems that when **mathNEWS** eventually crawls into the limelight Friday mornings, its readers do not necessarily want to look at (or try to understand) a proof of some obscure but incorrect result opaquely derived from the CS 375 course notes. Lord knows we have enough "proofs" to understand already. Too often the humour published here goes off the deep end, into the trenches and slimy bogs of esoterica.

However the title still has a nice ring to it. Why not try "Prof of the Week" instead? If this feature is revived, my recommendation would be Dr. Cizek for the category of "most repetitions of the word **sometimes** in a scheduled lecture." In the meantime, let's lay off the proofs and lay on the real issues (whatever they may be ...).

Tom Ivey

The Existence of Self

The existence of *self* is defined by *happenings* and the perceptions of *happenings*. The perception is also a *happening*. All things are *happenings* and they define *self*. It is important to realize that *self* is not a *happening*.

Why is the existence of *self* not a *happening*? Let's suppose that *self* is a *happening*. Because *self* is defined by *happenings*, there can be no *self* in the absence of *happenings*. Clearly, the non-existence of *self* is defined. However, if *self* is a *happening* then the existence of *self* is defined by its existence. There can be no non-existence of *self* and this theory quietly goes poof.

Any two *selfs* will not necessarily have the same perceptions of the same *happening*. This is primarily due to the fact that the perception is a *happening*. This is not to say that any two people necessarily have different perceptions, however they cannot communicate their perceptions successfully enough to establish this. The act of communication is a *happening* and it helps to define *self*. The perception of the communication is also a *happening* and defines the *self*. We can only perceive the perceptions of others through our own perceptions. This is not to say that all men are islands. We share common *happenings*, it is only our communications of them that are isolated.

I will illustrate this point. You who are reading this lecture will have noticed that i do not define my terms. If you have understood this lecture then you comprehend that any definition of mine will neither be understood nor interpreted in the way that i intend. Also there is a question of semantics. All terms in any definition given by me would have to be themselves defined.

From this point the theory diverges. There are two schools of thought dealing with the implications of *happenings*.

The first is the Javid school. This school maintains that because each *self* has a different interpretation of each *happening*, each interpretation is not perfectly correct. In each *happening* that is a perception, there is a flaw. This flaw is the innate human-ness of *self*. This theory defines the existence of God as the *self* that is defined by the correct perceptions of the *happenings* that define it.

The second school is the Ernie school, named after me. This school maintains that each perception of a *happening* is probably different, but that they are not necessarily different. We agree that the difference is the innate human-ness of *self*. We do not believe that there is one correct perception of a *happening*. This is because the perception of the *happening* is itself a *happening*. We feel that each perception is equally valid, and that all are true. We feel, however, that each perception may be invalid for any other *self*.

All perceptions of *happenings* are valid for the *self* that they define. There is no ultimate true way of perceiving a *happening*. There is only the way the *self* perceives the *happening*.

This theory is meant to define *self*. We feel that the Javid school has defined *self* in terms of God. We did not want a definition in terms of god. Because of the very nature of God, any definition of *self* that includes God immediately defines *self* in terms of God.

Thus endeth the lecture. Thank you and goodnight.

Dr. Ernie

mathNEWS and Bieberbach

You can breathe easy now, no more sleepless nights, your worries are over. Word on the street is that the Bieberbach conjecture has been proven. The reliability of our source is questionable - our only claim is that nobody argues with her.

The fact that this conjecture has been proven may open up various new and wonderful possibilities to you and the mathematical community in general, but to us here at the mathNEWS editor's desk it presents one rather significant problem: what is the Bieberbach conjecture? Even Alfred doesn't know and he's a regular Cary Timar when it comes to math. Anyone who can provide mathNEWS with a suitably simple explanation will be suitably rewarded.

Now this raises a fundamental question: What is mathNEWS? Is it our responsibility to research things like the Bieberbach conjecture?

Our newly adopted constitution says that mathNEWS :a) To inform Society members ... of the concerns of members in general through reports on relevant ... meetings and activities; b) To provide a forum where all Society members can express themselves; c) To entertain; but makes no mention of the relative significance of these purposes.

It is my personal belief that the primary purpose of mathNEWS is to entertain. If you are not sleeping in your Friday class then you probably want something entertaining. The other papers distributed on campus do an excellent job of keeping you informed about news and events on campus. It would be unrealistic to try to provide the same information via mathNEWS. News that is specific to the math department, faculty and students will be printed whenever it is presented but it requires input from the appropriate groups (nobody told us about class rep nominations, - what's Watsfic up to?) Furthermore there just plain isn't enough of this sort of news. In regards to being a forum for opinions and submissions of math undergrads, well, submissions are scarce but anything of merit is printed.

It all boils down to this: mathNEWS, your paper, requires your submissions of articles, information and opinions relevant to your fellow math undergrads. Finally, to anyone who is not satisfied with the quality of mathNEWS, all i can say is that it is the math undergrad student's paper and the blame is as much yours as it is ours.

Gridword

The winner for last week's Gridword is John McIntosh—come and pick up your prize at MathSoc, John. The correct solution should appear somewhere around here ...

In the meantime, here's another puzzle for this week. Good luck!

Across

- 1a. Beatles last album
- 1i. chocolate stuff
- 2a. Keaton objective
- 2i. Joyce's hero
- 3a. goes ever on and on
- 3f. a rhythmic clue
- 3m. French word
- 4c. coloured poison
- 4k. bedtime fairy
- 5a. Federal Post Office
- 5e. Burkowski
- 5l. Arrakis novel
- 6a. last half John believers
- 7a. dsch and Alfred
- 7e. seraglio
- 8b. U.S. revolutionary Allen
- 8l. diving duck
- 9a. not restful
- 9k. bad cheque
- 10a. Dada dictaphone
- 10e. pass the Japanese liquour
- 10m. corny unit
- 11a. pearl's mother
- 11g. Backus less
- 11j. 4k prefix
- 12c. twisting force
- 12m. naughty gate
- 13a. Venezuela copper centre
- 13f. finding again
- 14a. estrogen, eg.
- 14m. short giulio
- 15b. Bun o/s
- 15g. blue swedes
- 15n. Alfred's nemesis

- d1. kite or match
- d8. masculine nominative
- d11. wanders
- e1. penultimate Lanthanide
- e4. high grade plaster
- f1. watery moon-cycle
- f12. burning ball of wind
- g1. one who drains
- g9. catses
- h3. Spock's degree
- h6. North Dakota
- h9. Roman cremator
- i1. 3-d tesseract
- i6. one weber per square metre
- i12. undersea captain
- j1. CPU component
- j5. Mohs one
- j10. many Australian teddies
- k1. growth
- k6. Welsh town
- l1. confused with like
- l4. not nice
- m1. compounds with smelly metal
- m8. .01 Deutschmark
- n2. ancient explosive
- n10. without accent or stress
- o1. capacity for sensation
- o10. moonshine

Down

- a1. armour clasp
- a9. Utah mountain
- b1. ghostly greeting
- b5. naughty bits
- b13. Tommy, eg.
- c1. again, stranglers

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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Editors: dan schnabel & Cary Timar



mathSOC presents...

OKTOBERFEST '84

at the **ANNEX !!**

fri. **OCTOBER 5th**

6:00 pm

\$4.00 / person

Tickets on sale in the
mathSOC Office MC 3038

engSOC, sciSOC, ASU, & Fed. of Students

Maasthead

Well, done at 1:30 AM, this was incredible. Say what you like about the paper, but we had fun.

Thanks to Doctor Ernie; funny as usual and Tom Ivey for all the support and the only impressive article.

David, you're always welcome to watch and we'll try harder to find you something to do next time.

Special thanks to the gang who went "all the way." Specifically

(cont)

Jane, for not minding missing the pizza;
John O. for offering her "a ride".
Alfred and i thank you all.

(Please put something in our mailbox (i'm not begging, Jane) outside the third floor lounges.)

Apologies to Julia.

dsch



Wilfcon '84-
Sf & Fantasy Symposium
and
Watsfic
AD&D Tournament



October 5 & 6, 1984
Wilfrid Laurier University
Waterloo, Ontario
Guest author - George RR Martin