OTTAWA PC NEWS

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Review of the December meeting

Fun, fun, fun 'till your daddy takes the T-bird away

by John MacManus

The speakers boomed, "Here comes number 19, Bob Scowcroft", then the music faded.....yes, we were impressed. In fact, it was the best computerized sound system I have ever heard. Bob Scowcroft, normally seen in buttoned-down attire, was in jeans no less at our last meeting held on December 15th. He said, "It's a fun night tonight, no business".

Access for Windows

And to his word, it was the most fun-filled OPCUG meeting we've had in a long time. Talk about word processors, spreadsheets and databases was limited to a demonstration of Access for Windows. Not a big user of databases, I still had fun because the program's apparent friendly interface. Access has drag-and-drop capability, a Visual-BASIC-like toolbar, a Wizards system to help automate complex tasks and a cue card self-directed help system. We were also shown an interesting assortment of moustaches on all the embedded photos (even if they weren't male!). For the serious folks in the audience, Bob demonstrated Access's data extraction and report writing features while promising dBase, QBE, and SQL compatibility.

Workgroup for Windows

We were also treated to a demo of Workgroup for Windows, a product for a server-less LAN, for those who have to think and work as a group. Bob's LAN setup consisted of his two PCs chatting and sharing access to each other. Workgroup for Windows is actually Windows with networking, group scheduling and e-mail attached and is a realistic option for a small business network, free of uptight LAN managers. "Windows for Workgroups is doing the same thing for networking that the PC did for computing: personalizing it, bringing it to the desktop and placing control in the hands of end users" says Fred Langa, Windows Magazine (Jan/93). Wow, no wonder this Windows development is so controversial!

Sound

Then the real fun started with a demo of the Windows Sound System which includes a sound card, microphone, headphones and some sound utilities. Note: there is no CD-ROM controller, no external MIDI port and no SoundBlaster/AdLib support. Bob showed us how easy it is to record voice and mix other sounds. These tricks have been available to all SoundBlaster users for years, but it was fun to see the ease of implementation under Windows. Sound-annotated spreadsheets and memos will be "something else"!

CineMania and more

The best use of sound in Windows was displayed by Bob playing several CD-ROM disks. These disks included CineMania, with reviews of 19,000 movies from 1914-991, biographies of stars complete with audio clips, and lists of casts and awards. This is all cross-referenced to make that trip to the video store an occasion for informed choice rather than hit-and-miss. Another disk contained Multimedia Works, the well-known integrated package of applications with added sound and even an animated guide dog!

Music

The CD-ROM, Multimedia Beethoven, was amazing in the number of ways that one can study this classic.

Continued on page 2

INSIDE

FoxPro 2.5 : Cross platform dreams come true

by Andrew Ross MacNeill

Microsoft is days away from shipping FoxPro 2.5 and when it does, the white knight of database development, cross platform development, will become reality. FoxPro 2.0 introduced a new speed standard—one that all xBase packages still cannot meet—and a suite of Power Tools that allowed even the casual user to create applications that used fancy menus and screens, with objects previously found only in Windows development environments. With version 2.5, Microsoft sticks with a proven formula : take what's good and make it better. The strategy worked with Excel and it also works with FoxPro.

FoxPro 2.5 will be released in both Windows and DOS versions, with Unix and Macintosh soon to follow. There have some platform-specific changes as well as some across-the-board changes. FoxPro now supports up to 225 open areas. For those who still want Fox to be faster, early benchmarks suggest that 2.5 is anywhere from 1.5 to 5 times faster than 2.0. Also, FoxPro now has a pre-processor. This allows developers to define constants without having to use precious memory.

The DOS version does not offer any new interface objects. Instead, it concentrates on increasing the output speed and allowing cross-platform compatibility with the Windows version. On the other hand, the Windows version makes some interesting inroads, allowing developers to create fairly complex Windows applications. A new screen object, called Spinners completes the FoxPro screen interface, allowing a FoxPro application to have the full look and feel of a Windows application. The Windows version also supports all of the Windows features that make Windows the environment that it is. Users can now create OLE fields, allowing a FoxPro database to contain embedded or linked objects that can be opened simply by double-clicking. As well, FoxPro can act as a DDE Client or Server, allowing a database application to control another Windows application or be controlled by one. Instead of having to switch to MS Word to print the mailing labels with the data from your database, your application can now open MS Word and do it all for you. The Windows version also offers Microsoft Graph, a graphing utility that replaces FoxGraph. There will be no MS Graph for the DOS version.

Cross-Platform application development with FoxPro 2.5 is a joy. Once an application has been converted to the new 2.5 format, changes made in one environment can be moved into the other without any work. This allows screens across Windows and DOS to be identical. But if you want your screen to use Windows features such as fonts and graphics, these objects can be added to the same screen file. When running under Windows, the screen shows graphics and fonts: when running under DOS, the original screen remains intact.

FoxSIG meeting

The Fox SIG will be highlighting FoxPro 2.5 for both DOS and Windows at their next meeting February 4th. This meeting is at the Jean Talon Conference Room in the Jean Talon Building at Statistics Canada in Tunney's Pasture. For those who don't know where Tunney's Pasture is, it is at the corner of Holland and Scott. The Jean Talon Building is the last building on the right, heading north.

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continued from page 1

One can follow an historical path, an interpretative musical path, be quizzed on one's knowledge or just enjoy the music. This is the best application I'd seen or heard of for having a CD-ROM.

Games

If one had been stuck for an idea of a present for under the tree, then Bob gave the answer with Entertainment Pack IV for Windows. It contained six or seven new games with loud noises for the kids, mazes, puzzles, 3-D Tic-Tac-Toe and even chess.

More to come

Then Bob got into trouble. We were about to "boogie" into more fun with the upcoming CD-based encyclopedia, Encarta, due out in the spring. Encarta is the complete 29-volume set of 1992 Funk and Wagnalls New Encylopedia plus over 1000 extra articles on subjects from aardvark to zygote. But it wouldn't work. I found it heartening to see that even a techno-freak like Bob could have computer problems. Due to lack of time (I think Bob got carried away with those games: ed) we missed seeing Video for Windows and Visual BASIC v2. But I, for one, couldn't have taken any more excitement.

I think we should change that sound bite to "Here comes #1 for fun, Bob Scowcroft".

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Thank you...

Bob Scowcroft would like to thank Michael St. Louis of The Imaging Group for the loan of the overhead projection panel used at the December meeting.

Mark my words

by Julie Dustin

Back for a return engagement, Mark Minasi will be entertaining us at the January 28th meeting. The OPCUG members who saw him speak at last January's meeting will agree he is a very lively, funny speaker—a cross between A&E's comedy hour, Evening at the Improv, and The Computer Chronicles.

"There are many differences between the current PC operating systems," Mark explains. "Most of those differences can be grouped into three areas: memory management, multitasking and the graphical user interface (GUI)." This published author of 8 books plans to help us grade Windows 3.1, Windows NT and OS/2 in all three areas during his talk.

"You have seen how well these systems handle memory, whenever the UAE message appears. In theory, memory is managed by the consulting applications. In reality we know they haven't quite worked everything out. Multi-tasking is the art of intelligently allocating CPU time. With Windows, the mechanics are simpler and there is no overhead. Windows NT and OS/2 have more complex multi-tasking routines but this means they are much more robust."

"I believe GUIs are unnecessary for advanced operating systems," Mark adds. "Windows did improve in this area with version 3.1, but OS/2 and NT are another story".

Mark Minasi is a respected consultant and educator in microcomputers, data communications and artificial intelligence. His class and published reference book, *Maintaining and Troubleshooting the IBM PC and PS/2s* have taught thousands how to keep their machines in top shape. Mark writes monthly columns for *Compute!* and *AI Expert*, and is a contributing editor to *Byte*. He also wrote the *Inside OS/2* column for *Byte* for four years.

Mark is an independent consultant, president of the firm, Mark Minasi and Associates, and a former vice-president of the Washington, DC Capital PC Users Group. His published books include the recently released *Trouble-shooting Windows*, and *Inside OS/2*.

In case you think you recognize the name, this is the man whose courses Data-Tech Institute is constantly promoting in those black and white flyers you receive every 6 weeks in the mail.

Note: If you're wondering what happened to the previously-announced WordPerfect presentation, it has been rescheduled to the spring.

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Calendar *(subject to change)*

General Meeting Location: Sir Robert Borden HS
131 Greenbank Road

General Meeting Time: 7:30 p.m. to 10 p.m.

Date and Time	Topic and Location
THURSDAY, January 28	See this page.
Tuesday, February 23	NEC and CDR Technologies will present CD drives and CD ROMs.

Shareware Shines!

by Norman Dafoe

Don't miss out on the excellent specialty disks from the OPCUG Software Library. How do we know they're great? They almost sold out at the December meeting! More copies will be available at the January meeting, so be sure to visit the Library table for the following shareware disks:

GAME PACK #4: Spear of Destiny, Xerix, Solitaire Suite,

GAME PACK #5: Oxyd and Brix puzzles

FOX DISK #2: Fox hints & tips

MEAL MASTER v7.03: Thousands of recipes

NAKED EYE v1.10: SuperVGA GIF viewer

QWK READERS: Off-line mail readers

Note: Check out the monthly 360kbyte Disk of the Month too. It contains a variety of smaller programs collected from various sources including PC Magazine and other BBSs.

If you have any special requests, contact me at the meetings or on the PUB.

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Stay home! Catch some rays

by John MacManus

The generation of photo-realistic images has been a challenge for computer graphics for decades. After all, we see what the camera "sees". We understand how the camera works, so we should be able to make a computer recreate photo-like images.

As we look at our surroundings we observe some basic perceptual truths: near objects hide far objects, light interacts with objects revealing textures, causing reflection, refraction and shadowing.

In fact, computational methods for creating photo-realistic images exist. CAD programs deal with the problems such as removing hidden objects and creating surface textures and shadows individually. But a robust combination which solves the illumination problem globally has been hard to find.

One partial solution has been the use of ray tracing algorithms. The aim is to use the well-understood physics of light to help draw the desired image. The created image is based on the laws of optics which have been used for centuries to describe how mirrors, prisms and lenses affect light.

The theory of ray tracing

Originally, the theory was that each ray of light from a source could be traced, and a record kept of the ray's travels as it bounces off objects. However, this would require massive computation and would be inefficient since most light rays never reach the viewer, but are bounced out of the scene. Fortunately, there is a much more efficient and practical way: a reverse tracing of the rays. Rays can be traced from the eye to the object. Thus, only rays which reach the eye contribute to the final image. This simplified reverse method is the basis of all modern ray tracing.

Ray tracing takes power

Ray tracing is, however, computationally expensive. Until recently, only mainframe computers or workstations were capable of generating the glossy spheres that reflect checkered tiled floors which we have all seen on the covers of coffee table computer graphics books.

Ray tracing for the PC

In the last few years, happily, ray tracing has come slowly down to the PC platform. Now is an opportune time to start personal ray tracing because of the intense competition, commercial and otherwise, in this arena.

Late '92 saw the release of *POV-Ray* (Persistence of Vision Ray Tracer), a freeware (but copyrighted), Stone Soup concept program (see sidebar). The Stone Soup concept involves many people working together to develop a program. The POV-Ray team has gathered on the Graphics Forum of CompuServe and built the program into a definitive contender for the best multi-platform personal ray tracer. This is very good news indeed for all of us aspiring computer graphics nerds.

The bad news is that some horsepower is still required for acceptable performance: a 386 CPU, an FPU, 2MB of RAM, and a video card capable of at least 640 X 480 resolution and 256 colours. Is it fair to say that any PC user interested in computer graphics will already have such a machine? Even with such a setup, a simple image of half a dozen objects can take about an hour to render full screen. But you can use much smaller images until you are completely happy with the scene.

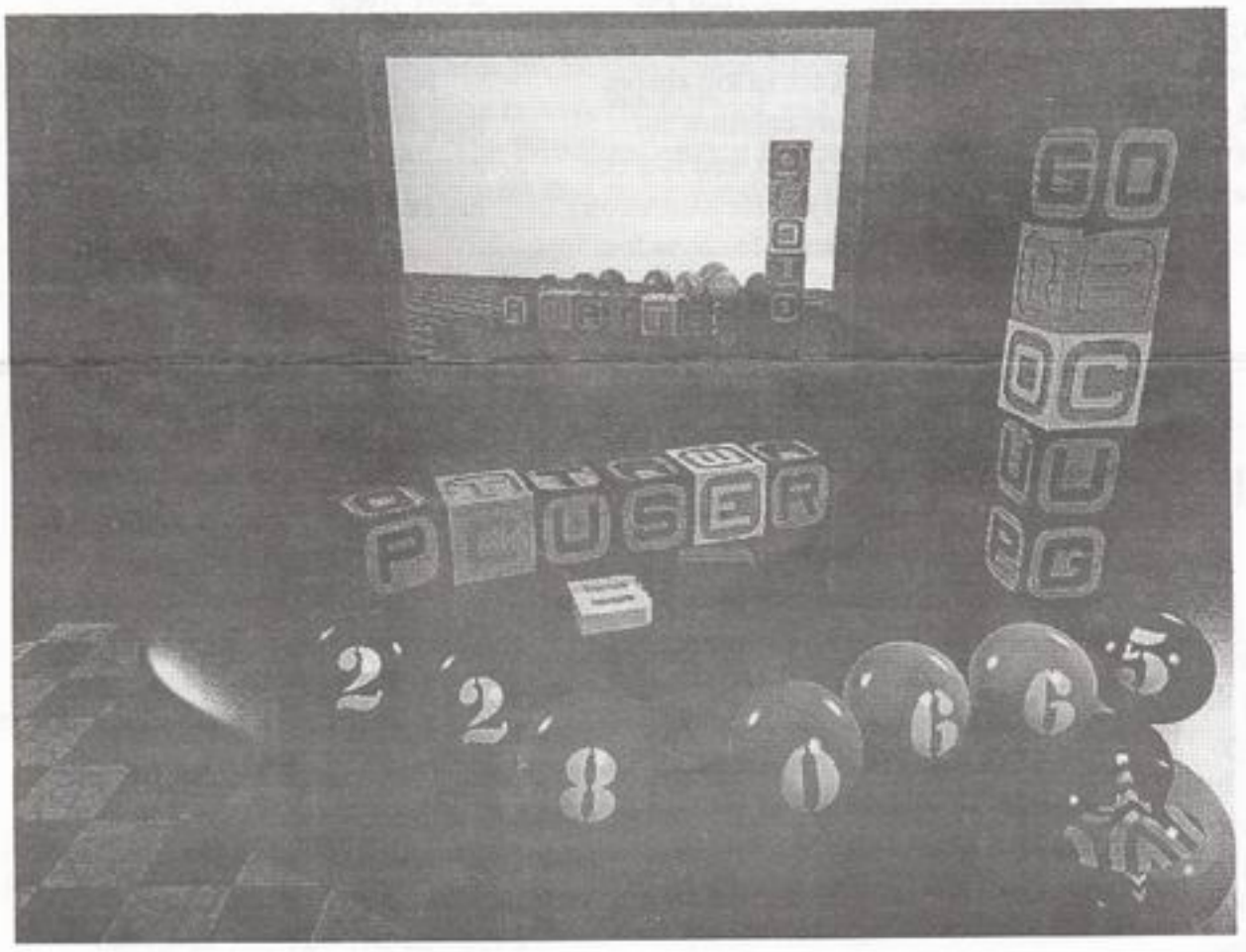

Figure 1

How you use POV-Ray

The program is command line driven. It calls an ASCII scene description file which you write yourself (see Figure 2) to define the objects and their surface properties, the camera position and finally the light source. This file can call many "include" files which can in turn contain definitions of complex colours, textures and even objects. The program has many built-in shapes and can do "constructive solid geometry" which allows you to add (fuse shapes) or subtract (punch holes in one shape using another). This modularity is one of the things which make the program so flexible. You can get files from other users which describe new and wonderful shapes, wood, metal, glass and stone textures, alphabets, and on and on. It is also possible to bitmap textures onto objects wrapping them around spheres, cubes and cylinders. In the sample picture I made (Figure 1), I got the letters for the cubes from a fellow in Australia via CompuServe.

POV-Ray is a good place to start ray-tracing. There are several other competitive PC ray-tracers (e.g., Vivid, Polyray, Rayshade) but POV-Ray is the best for the beginner because of its large user base. There are also many goodies scattered out there on the electronic bulletin boards. There are GIFs and scene files from which to learn and other shareware programs you can use in conjunction with POV-Ray. The affordable shareware CAD program, NorthCAD-3D (Quest Company) can have its files rendered by POV-Ray. The CAD file format DXF can also be translated. There are support utilities to help in building scenes from primitive shapes such as spheres or tori (doughnut shapes), adding lettering and doing animation.

Books

And finally the books. Available in Ottawa since Fall '92 is the Waite Group Press Image Lab book by Tom Wegner, *Explore, manipulate, and create images on your PC.* Wegner is the author of the book *Fractal Creations* (Waite also) about Fractint and a good read. The Image Lab book presents shareware and freeware programs (on the included disk) in an integrated approach to PC computer graphics. There are sections on CompuShow (GIF viewer), Piclab (image processor), Improces (a 256 colour paint program and image processor), Fractint (fractal generator), POV-Ray (ray-tracer), and Image Alchemy (file converter). The final chapter is on using these programs together to build complex images ending up with rendering by POV-Ray. Watch out also for *Ray Tracing Creations* by the POV-Ray team leader, Drew Wells, which is due out on the Spring list from the Waite Group.

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```
// using the letters from alphabet.inc by Bryan Allman
// OPCUG Ottawa PCUser Group on table

#include "colors.inc"
#include "textures.inc"
#include "shapes.inc"
#include "shapes2.inc"
#include "stones.inc"
#include "alphabet.inc"


camera{
            location 30 -75
            up 1 0
            right 0 0
            look_at 4 0
   }
```

Figure 2: A few sample lines of code from 17KB file to make Figure 1

Stone Soup

The Stone Soup concept for creating free, but copyrighted software was hugely successful in the generation of the fractal generator par excellence, Fractint. The Fractint program was, and continues to be, built by many people who freely offer their ideas and expertise. It is, after many years, the finest fractal graphics program bar none, and (now at version 17) is much in use for educational, illustrative and fun purposes..

The name, Stone Soup, comes from the fable which tells of a traveller who arrives hungry in an impoverished village. He begs for a pot of hot water, and then proceeds to make soup with a stone which he takes from his bag. The curious gather to overhear the traveller praise the taste of his soup, but say that stone soup with cabbage is even better. A villager approaches and drops a head of cabbage in the pot. They both agree that the soup is tasty. The traveller explains how he once had tasted stone cabbage soup with some salt pork and it was even better. Another villager brings some pork from hiding and adds it to the pot. The soup does taste better. And so it went. Soon there were onions, carrots, potatoes added, and a great meal was enjoyed by all.

The 1992 OS/2 farmers' almanac

by Jackson Hibler

Over the last year, since OS/2 was released, much has been said on the PUB. Jackson has condensed the conversations of 15 or so people into this article.

Well, folks, it was a bright spring, full of promise, full of hope... Weary from a winter of holding the Windows (3.0) shut against a snowdrift of problems, we planted the new OS/2 in our machines with great expectations.

Windows 3.0 had been a gardener's nightmare: PIFs and .INIs, unstable with DOS programs, fussy with everything, the program was only suitable to fertilize applications from Micrografx or Microsoft. It couldn't support our DOS applications at all well. Root rot and tangled vines, the thing had not over-wintered well.

OS/2 promised to nurture our DOS programs in a multitasking environment. And indeed, it did! OS/2 also promised to let us get back to working just one garden: switching to and fro from DOS to GUI to DOS would become an option, not a necessity. With joyous hope we knelt down to plant...only to be drenched by our first spring shower: OS/2 just wouldn't install on many of our machines!

OS/2 began life gene-tailored to fit specific hardware, and although IBM has made a great effort to expand the range of machines, controllers and device drivers with which it will work, the list is still far from complete. Because OS/2 does not have, or doesn't document, a way for the user to examine or adjust its approach to the hardware, all hardware compatibility must be built in by IBM. When they get it right, it works! When they don't, it don't.

Contrary to the hybrid of DOS and Windows, OS/2 is an integrated operating environment. It contains its own DOS code and its own Windows code. It also wants to control the hardware, its way, using its defaults. It doesn't like to be told—in most cases it has no ears to hear—what the user wants or even what the machine it's running on has to tell it.

Hard drive partitioning

One of the first full thunderstorms of the season blew in from this quarter. To condense Willem Vandjik's detailed analysis on the PUB, OS/2's Boot Manager is a sort of FDISK in hiding. Being already under ground, it likes to nose past the CMOS RAM-listed hard disk configuration to see what your "translating" hard drive is really like. And having discovered what it thinks is the "reality" of the hard drive's cylinders, heads and sectors, it then proceeds to try to partition and format the drive in ways that sometimes not only DOS, but also even OS/2 cannot handle. Willem and I found ourselves not only locked out of OS/2, but unable to repartition our hard drives thereafter! Yes, we finally fixed our drives, but we also stayed with OS/2 firmly planted in the "Dual Boot" FAT configuration after that.

File and application management

Once OS/2 germinated, however, there remained much summer husbandry to configure and nurture individual DOS or Windows applications. OS/2's new desktop defaults to a Mac-like iconic representation of files...something that is worse than useless when you have thousands of files. Changing to permanent detailed file lists, however, is a very un-Mac-like chore that must be repeated for each and every subdirectory on the drive. Somewhere at about the third "weeding", I began to realize that cultivating OS/2 wasn't accomplishing much.

Networks

Trouble on the homestead reached its nadir along about the time Alan German tried to take his OS/2 back to the LAN. The original OS/2 documentation suggested that where you are lacking the proper "requesters" or other OS/2-specific drivers to link to your local area network the "official" way, a Virtual Device Machine (VDM) could be invoked that would let you load native DOS and run the network drivers therein...the whole to be accessible as a session on the OS/2 desktop. Sounded great, but Alan's experiences were matched by my own on a different LAN, where things would indeed work for a while, and then unpredictably go awry. The last word I got from IBM support is that the VDM/LAN route is just not reliable, and that, indeed, we have gone further down this garden path than they have managed to get themselves...while still not getting the system to bear fruit, mind you.

Service level upgrade

Then came the fall harvest: a bumper crop of new fruit! The agronomists at IBM proudly offered us our choice--a much more bug-resistant variety called their Service Level Upgrade (SLU), or a new hybrid "2.1-beta" that combined the SLU with Windows 3.1 compatibility! Dropping the insect-scarred plant we had spent the summer cultivating, we reached out greedily for the glossy new fruit only to discover that for many of us it was inedible! It seems that the Service Level Upgrade may have "solved" some problems by locking many of us out of the garden:

Continued on page 8

Using the OPCUG Bulletin Board: Finding your way around the PUB

by Eric Clyde

Attendees at recent Beginners' SIG meetings have indicated a desire to know more about the PUB, as our User Group Bulletin Board is known. This article provides a brief introduction.

You'll need a modem and communications software to connect your computer to the PUB. If you have a modem, but don't yet have any communications software, a special disk is available from the software librarian to make things easier. It contains Procomm, a popular shareware communications package, with a special dialer file ready to access the PUB.

When the PUB answers your call, you are requested to enter some information such as your name. This is called signing on.

Once you have signed on, if there are any personal messages awaiting, you will be asked if you want to look at them at that time. Once past that point, you will be able to explore the richness of information and help available. The organization is outlined in the map on the insert to this newsletter, and the information is accessed through menus.

The first menu shows, in abbreviated form, the section headings 'Club', 'Message', 'Files', etc., as in the map. If you input 'M' (for Message), you will see the next menu, which gives a choice of message areas as shown on the map. Each level is accessed by typing a letter or number, as indicated on the menu. Entering the character ! will get help at any stage; / will take you back to the main menu; and ~ will get you to the 'Goodbye' or sign off menu.

More next time.

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Bits of DTP

by Julie Dustin

Are we stuck with paying over $400 for word processing packages? Not according to the National Software Testing Laboratories in Pennsylvannia. They selected LotusWrite over CA-Textor, Professional Write Plus and JustWrite in a recent evaluation published in Computing Canada (Jan.4/93). These products can do much of your desktop publishing work with their templates, styles, WYSIWYG effects, column-mapping and frame-setting features. Yes, they even handle graphics. Note, however, you may have to give up functions like tables of contents, footnotes and grammar checking. Not bad for products costing less than $300 Cdn!

LaserJet 4

I recently read that the best-selling HP LaserJet II is being "replaced" with the LaserJet 4 and 4M. This new laser printer can be used in mixed environments — meaning ports for parallel, serial, Macintoshes, HP PCL 5 and PostScript depending on the model. My question, why can't we keep both models? The LaserJet II was the least expensive in the HP line.

Which Word is which?

Being a PC and Macintosh user, it is interesting to note the differences, or should I say, increasing similarities between Word for Windows and Word for the Macintosh. It seems the cross-pollination has caused some Windows features to be re-written for the Mac — ironic considering Word was on the Mac years before it was introduced on Windows. These features include customizable button bars and embedded access to drawing and graphing tools. I do admit, the text and voice annotation is the best fun I've had so far on the Mac version of Word!

Group notes

Report on December 15th meeting: Some brave members of the group brought samples to illustrate their achievements done on with software products including Ventura, PageMaker, Word for Windows, WordPerfect and Harvard Graphics. Note: these "show-and-tell" items are extremely interesting for everyone and are welcome at all DTP meetings. Show-and-tell will be held in Room 213 after the January 28th meeting.

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Ottawa PC News

Ottawa PC News is the newsletter of the Ottawa PC Users' Group (OPCUG), and is published monthly except in June and July.

Deadline
Deadline for submissions is the last day of the month prior to publication.

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Group Meetings
OPCUG meets monthly except in June and July. Check the answering machine, the PUB and the newsletter for the date and place of each meeting. Meeting times are 7:30 p.m. to 10 p.m.

Membership fees
$25 per year

Disk-of-the-Month
$25 for 5.25 ins. diskettes and $35 per year for 3.5 ins. (for 10 diskettes)

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Continued from page 6

machines that ran the original 2.0 will not install or run the SLU.

Unfortunately, even for those like Pierre Lacasse who have now successfully installed the SLU, the season is growing short. While waiting for his SLU, Pierre discovered that it was nice to spend some uninterrupted productive time on his computer...with Windows! Problems with OS/2 had led him, and many of the rest of us, to look back over our shoulders at 3.1, blooming nicely in its pot in our window since the spring. Much of what was so difficult to do reliably in 3.0 can be done boldly with 3.1. DOS multitasking within Windows can now be accomplished with considerable peace of mind. There's still plenty of "cultivation" needed for Windows to thrive...but it's productive cultivation! And when things go wrong, as they still will, 3.1 will often let you gracefully cull the twisted plant before the rot infects the entire garden. (OS/2 was supposed to have ended that problem--but so far it hasn't.)

Next season

And what should we consider as we open our gardener's catalogs and behold the glossy promise of Windows NT for the spring? We have only to glance up at OS/2 eking out its winter of discontent on our shelves to wonder... Most times the promise is far short of the performance. I'm thinking most of us will be cultivating Windows 3.1 for another year or so... Let the breeders work on these newfangled hybrids a bit more, eh?

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MEMBERSHIP APPLICATION/RENEWAL

Membership # *(if you are renewing)*

First name *Last name (please use caps.)*

Address *Apt. #*

City *Province* *Postal Code* *Country*

( ) *Home phone #* ( ) *Business phone #* ( ) *Fax #*

I use the following hardware: ☐ XT ☐ AT-286 ☐ 386 ☐ 486
(Check those that apply.) ☐ 300 baud modem ☐ 1200 baud modem
☐ VGA ☐ EGA ☐ Herc. ☐ 2400 baud modem ☐ 9600 baud modem

I would like to help in the following club activities:
(Check those that apply.)
☐ Programming Instruction
☐ Hardware techniques
☐ Newsletter Input
☐ Software library
☐ Promotion/Publicity
☐ Bulletin Board
☐ Other .....

I use the following software:

MEMBERSHIP FEE $ 25.00

Disk of the month subscription _____
($25/yr. for 5.25" or $35/yr for 3.5" 10 disks per year) _____

Cheque ☐ *Cash* ☐ TOTAL $ _____

Mail to: Ottawa PC Users' Group
3 Thatcher St., Nepean, Ont. K2G 1S6

PC Users'Group Bulletin Board

<<< B B S M A P >>>

Note: (*) indicates this menu is available from all menus.