ENTERTAINMENT

GamePort

BY BOB LINDSTROM

When is a computer game not a game? When it's Portal, a science-fiction book in a personal computer.

'GamePort' this month features interviews with the authors of Portal and The Book of Adventure Games.

A NEW GENRE

The plot intrigue of author Rob Swigart's Portal hooked me quickly. By the time the program instructed me to insert disk 2, I knew that I would see this five-sided marathon through to its conclusion.

Some 20 hours later, Portal ended. I had pursued its drama with the zeal of a crazed joystick mangler, yet I hadn't immolated a single video alien. My imagination had been pushed to the limit, even though I hadn't solved one text-adventure puzzle. In fact, I hadn't called upon the skills that you usually have to exploit to play a computer game.

For those reasons and many others, Portal defies almost all computer-game conventions. No wonder—it's not a game. Activision accurately bills it as a "computer novel." More than that, it's one of the most unexpected, entertaining, and rewarding software products so far in 1987.

To put it simply, Portal is a science-fiction book in a personal computer. It is not, however, "interactive fiction." Interactive fiction usually means a text adventure with a little less puzzle and a bit more prose. Portal, on the other hand, truly is a computer novel, an electronic reading experience that has lots of vivid prose and a bit of interactivity. Neither game nor adventure, Portal represents an entirely new form of entertainment software.

In Portal you are an explorer who has returned to Earth in 2106 from an aborted space mission. On arrival, you discover an Earth devoid of human life. Animals and plants thrive. Cities proudly stand intact. Every human being, however, has disappeared.

You discover a computer terminal (your Apple plays this role) connected to a vast, multinational database. Using a joystick to navigate the graphic interface of the terminal, you and an artificial-intelligence program called Homer scour the system trying to account for the mystifying absence of humanity.

To play Portal is to read it. As you make your way through the database, pieces of the story assemble like tiles in a mosaic, to use Swigart's own description. It's like reading
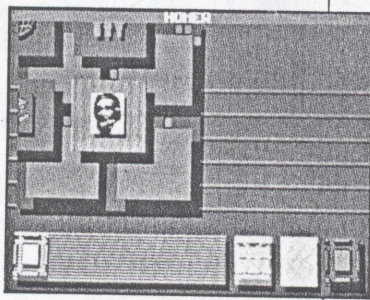
a novel that is selectively revealed through the medium of the database.

Without betraying too many secrets of an involved and involving plot, I can tell you that your searches put you on the track of an all-powerful international corporation and a young man who makes a subversive discovery in the psychic sciences. With a rich use of technojargon and a frightening ability to speculate on what our future might be, Swigart springs surprise after surprise, maintaining the tension and the mystery until the last screen of text. Don't be surprised if you are emotionally moved at the end. Portal

is touching as well as thought-provoking.

For all its innovation, Portal seems destined to leave some computer users mystified, not by the plot but by the program itself. Serious adventure-game lovers may be disappointed, even angered, by Portal's dearth of participation and lack of puzzles. Arcade-game players will find nothing to challenge their joy-
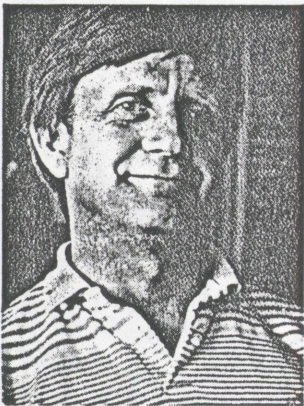
ROB SWIGART

sticks here, despite the smooth workings of the graphic database, and younger players may well be confused by Swigart's complex and refreshingly adult vocabulary.

Many others will see Portal as a cracklingly good yarn, intelligently told in a fascinating new medium.

"Computer fiction is an exciting area to be in," said Swigart in an interview. "This is the dawn. It's nice to be involved in shaping the medium." Swigart is not a typical game designer, any more than Portal is a typical game. He holds a Ph.D. in comparative literature, teaches writing at San Jose State University, and is a published novelist whose latest book is *Vector*, described as "a biotechnology thriller."

Former Activision "producer" Brad Fregger approached Swigart with the idea of writing a computer novel more than two years ago. Intrigued by the idea of putting a novel into a computer format, Swigart attempted to discover ways in which computers could enhance storytelling.

In trying to find the heart of a new art form, he examined the beginnings of other art forms. "Throughout history, the tools that man develops are initially for doing a job," Swigart explained. "But once the job is done, the tool is still there." At that point, Swigart suggested, men begin to play games with tools. "Eventually, we start changing the games and start producing art," he said.
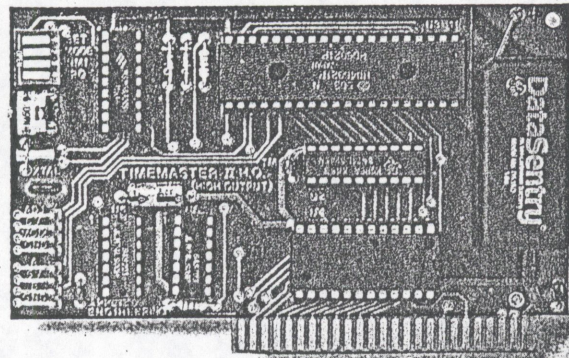
For Portal, Swigart took that most utilitarian computer application, the database; filled it with fictional information; and came up with an artistic approach to a computer tool.

The computerized novel does have disadvantages. As producer Fregger pointed out, tongue slightly in cheek, "You can't take a computer under the covers with a flashlight."

On the other hand, Swigart's database setting allows him to make his text unusually concentrated. In one section of the database, Homer can relate a narrative loaded with unfamiliar and unexplained terms. As soon as a phrase shows up, however, an entry that defines it appears in a medical or scientific database. With this secondary support from other databases, Homer's narrative moves forward rapidly.

E/N/T/E/R/T/A/I/N/M/E/N/T

Portal will be a controversial product likely to attract public reactions as distinctive as the software itself. But the program is just the dawn poised to light up a new horizon of entertainment software and perhaps enlighten a new audience about the joys of computer entertainment.

Activision's Portal is $39.95 for the Apple II line of computers.

IN PURSUIT OF ADVENTURE

My Apple owes its life to Kim R. Schuette, the adventurer's friend.

You know how it is. Tormented by Grues and teased by Leather Goddesses, I've let an entire evening slip away in pursuit of an adventure game. About 3 A.M. my frustration level starts to peak, and it seems the perfect time to open another session at the Lindstrom Testing Laboratory. That's the one-man, grass-roots company that researches how well Apple keyboards withstand repeated fist blows or measures an Apple computer's durability when it's forward-passed through a plate-glass

KIM SCHUETTE

window onto a driveway two stories below.

Before I make the local Apple repair shop wealthy, though, I regain control and reach for Schuette's *The Book of Adventure Games*. This two-volume set of indispensable books contains descriptions, brief reviews, and complete maps for nearly 150 popular adventure games, from Adventure to Zork, from Wizardry to Ultima. And when the going gets tough, the not-so-tough get going to the back of the books, where Schuette has tastefully tucked solutions to most of the games.

Who is this "computertarian" (the silicon equivalent of a humanitarian) who has spared thousands of innocent micros from the tantrums of their vicious owners? Is

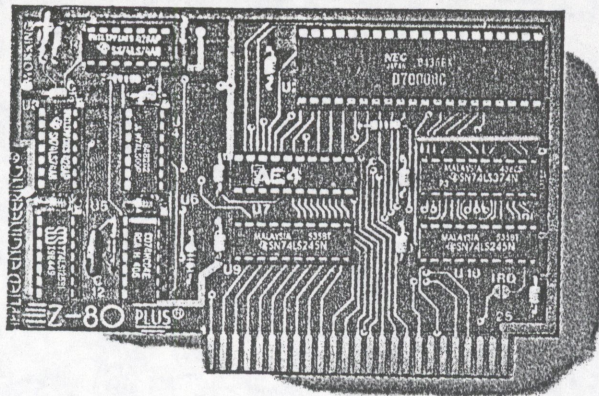he a programmer? Is he a computer student who plays King's Quest when he should be designing flowcharts? Or is he merely a swift man with a disk disassembler, a raider of the lost byte?

No, Schuette is only another game player like you and me. It's just that he's a particularly obsessive one. A Los Angeles aerospace engineer in his mid-50s, Schuette confesses that he plays adventure games two hours

P O R T A L

A COMPUTER NOVEL

by Gerald Masters

When I first heard about Portal, I could hardly wait. I am a hardcore Science Fiction fan and have been ever since someone left a copy of Andre Norton's "The Last Planet" where I could find it some 30 years ago. (Proving the old cliche, "Spare the read and spoil the child.)

I picked up the package at my local sofware shop, hurried home, ripped off the shrink wrap, powered up the machinery and began reading the instructions. Nothing really surprising, but the disks (three of them) are copy protected. The notice warns that copying them MAY ? ? damage them. As a firm believer in always having a backup, I felt a little annoyed, but cannot blame the manufacturer for the problems caused by rampant piracy.

The instructions consist of: a map of the World Administrative Regions; a Prolog which acquaints you with the character from whose viewpoint you will experience portal; and the Worldnet Emergency Operating Instructions, which explain Worldnet, the database you will find yourself exploring. These instructions are full of nice little tidbits (italics mine) such as: "Worldnet assumes you have access to an active terminal, are in sentient physical condition, and are familiar with Worldnet coding procedures." and "Please exercise patience with this archaic form of computer interface." But they do explain the Worldnet database.

The Prolog is the diary of an explorer astronaut who has returned from a long voyage to find the Earth totally changed. The cities are gone, replaced by forests and parkland and all human life seems to have vanished from the solar system. This, naturally, bothers our explorer who sets out to visit the few remaining evidences of humanity in an effort to discover some clue to what has happened. In a dome which covers what was once the Chicago Loop, he discovers the Worldnet Emergency Operating Instructions and an "emergency access terminal" (your computer). So he (you) reads the instructions and logs on to Worldnet. Following his example, so do I.

Music ! A requester box asking me for my DNA code! Not remembering my exact DNA sequence and not really wishing to spend the next two days typing anyway, I decide to see if it will settle for my name. Success ! It likes me ! More Music, Graphics, a screen full of requestor boxes waiting to see where I would like to start.

There are 12 selections on the screen: MED10, PSILINK, SCITECH, HISTORY, MILITARY, LIFE SUPPORT, GEOGRAPHY, WASATCH, PSYCHOLOGY, CENTRAL P, EDMOD and HOMER. Life Support, Wasatch, Psychology and Edmod are graphic displays of such information as Psycological profiles, intelligence profiles, educational and emotional maturity, metabolic profiles and family trees of the characters. The graphs for each character appear in the directory when he enters the story. Note: The program never requires you to access these graphic databases. They don't contain any "Must Read" information. The remaining selections are the meat of the program.

Homer, an Artificial Intelligence designed as a storyteller, recounts the events which led to the world becoming empty. In History you learn about the larger "newsmaking" events. Central Processing is the "operating system" of the Worldnet. Medmod is a database of medical information. Geography, information about locations mentioned in the story. And the two "proscribed" databases. Psilink holds information about psychic events and research which has been declared dangerous; Military, information about several of the battles which are mentioned. When you select one of these, a box appears asking you to enter your access code. These "proscribed" databases turn out to be accessible by clicking in the box. The program "thinks" it is talking to Homer who has access priority. In other words, just another layer of requestor box.

I select Homer. Homer tells me the story of Peter Devore, who is accidently given access to Psylink one afternoon and learns a set of equations which explain the workings of the psychic abilities. He becomes interested in these equations and begins to study them. When this comes to the attention of the Intercorporate Council (which has taken over the functions of government worldwide), he comes under the scrutiny of a team led by Regent Sabie. This team's purpose is to discourage psychic research. Such knowlege is reguarded as dangerous to world stability and those who persist in such research are killed.

So it is Peter against "Big Brother" in search of freedom. We are introduced to the "Ants", residents of Antarctica, the only area free from the domination of Intercorp. The Ants are freedom oriented and seem to be pursuing similar research. Somehow they learn about Peter and send a rescue team to

bring him and a group of friends to Antarctica. After a bit of a chase they arrive in Antarctica and are welcomed in the Ant research facility.

Later there is a small war when Intercorp invades the research facility in an attempt to recapture Peter and halt his research. Peter and most of his companions escape during the attack, which is a failure, and Peter continues his work in a new location, finally discovering the PORTAL of the title. Through which all Humanity eventually passes. Except our unhappy astronaut who returns to find himself alone. Together he and Homer must find out where they went and if they plan to return. (Homer is lonely, the astronaut even more so.) And now, my thoughts on this product.

The artwork is impressive. The music, a little less so. The same sequence of notes sounds every time a selection is made from the main panel and every time you return to it. This was only a minor annoyance, I did not expect to hear the theme from Star Wars. I just switched the stereo to a good music station. Of more importance is the presentation of the story. This is where I found myself disappointed.

At first the "treasure hunt" aspect of the process was fun. You are presented with information in small doses in each file you access. There is a prescribed sequence for reading the files which you must follow. The program will not admit there are any more files in a directory until you locate and read the pre-requisite files in some other directory. You are given hints as to where to look next and sometimes Homer will flash and insist you read his file next. Much of the time though, you just keep looking until you find a new file in one of the databases. This grows old in a hurry (the music mentioned earlier, the same old requestor screen etc.)

Good as the artwork is, I was here to read the story. This is where the program suffers. Too much of the story seems to be either padding or ideas which were never developed properly.

A few examples: We are told several times that Regent Sable is also Peter's father. This seems to be an attempt to introduce extra tension into the story. It fails because, although the fact of fatherhood is mentioned, it never seems to matter to any of the characters. In fact, I can recall no mention of how or when he met Peter's mother, what sort of relationship they had, when and why they seperated, or any evidence that he and Peter have ever met.

As proof that Peter is Psychic, in the early and middle parts of the story, we are given glimpses of Peter's telepathic-dream relationship with Wanda Cisleuf. Wanda is a passenger in cryo-freeze on a voyage to another star. They are in love, which of course presents them with a problem. I kept waiting for them to discover a solution as the end of the novel approached. But the authors seem to have forgotten about her by then.

Wanda is on her voyage (a colony project) because she has a genetic disorder which has a small chance of being cured

by the long period in freeze. What logic could justify sending a seriously ill person to a colony where there will be no facilities to care for her if the voyage does not cure her. The most pressing need of any colony would be pioneer-farmer-builder types. If the freeze is the cure, she can be frozen without going anywhere. If the voyage itself is the cure, a hospital ship would be a better solution. (Wanda is only one of many people who share the disease.)

The presentation is another problem. The use of multiple databases to contain different types of information makes the story very episodic. Too much so! You are presented with an incident in which a new piece of technology is mentioned and must then go to the SCITECH database to read a paragraph about it before you can proceed. Or HOMER presents you with a single incident spread out over several files. Some of these files have as little as one sentence in them. Hey, guys, you promised us a novel! Do you really believe that those of us purchasing this product have such short attention spans that we can't follow the story if it comes in larger chunks?

I started this story and made it thru the first disk in one evening. When I resumed the following evening, I fell asleep about half way thru the second disk. It took several more evenings to finally finish. The slow pace enforced by constantly returning to the main panel to search for the next database and waiting for the disk accesses involved became boring in short order. I read three or four books a week when I can find interesting ones (and the time, sometimes I neglect to mow the lawn.) PORTAL put me about a week behind.

I discussed Portal with some friends at a meeting of our local science fiction club, and the concensus was: We buy a novel to read, not to spend our time clicking the mouse and waiting for the disk drive.

My advice to the authors: This is a fair first effort, but to capture the hardcore reader you will need to unlearn some of the things learned from "interactive" computer text games. Present the story first, anything which does not advance the action or provide us with insight into the characters must go. The story has a number of interesting concepts introduced, but too many of them are never developed. Use it or get rid of it. Use sound and music to advance the action, otherwise let silence prevail.

The same applies to artwork. If a character is extra smart or has musical talent, make it obvious in the action. A graph showing a high musical aptitude is just so much "GEE WHIZ" which will be ignored if it is not important. A better use of artwork would be pictures of the characters or illustrations of events.

My advice to purchasers: PORTAL will be better enjoyed in relatively short sessions. Make use of the save option occasionally and do something else for a while to avoid becoming bored. If nothing else, PORTAL will probably become a collectors item when more and better novels begin to appear.

•AC•

Portal

ST notes

by D.F. Scott

Newsworthy happenings in the ST world.

Tuning up the production line.

The once bogged down machine that was the Atari production line seems to be churning at near full speed again. The Mega STs 2 and 4, for example, *were* released in Europe, with both blitter and new TOS installed. Reports are that the same machines, with minor differences, are being readied for distribution by Atari U.S. at the time of this writing.

Our counterpart in Great Britain, *ST User International*, in its May issue, released photographs of the rear and interior of the Megas. There's an internal fan after all; and there's a pop-out slot for what appears to be an optional second hard drive port. Perhaps most important, however, is the pop-out slot which makes extra room for a bus expansion *outside* the machine.

Computer Systems News reports that Sig Hartmann, who's in charge of signing on Original Equipment Manufacturers under Atari's banner, has signed an agreement with a company called Idris, to jointly produce an ST version of UNIX. Unlike other UNIX versions, the Idris 68000 UNIX doesn't require a full-scale memory management unit—a device the ST is *not* equipped with. Idris may begin shipping a RAM version as early as September. And, if all goes well, according to the report, Idris may be hired to produce the OS for Atari's 68020 computer, which Hartmann now calls the "ES."

Should this 68020 machine be used as a UNIX networking computer, it will be the Mega ST, with its full 68000 expansion bus, which will be ready to be plugged in as a UNIX terminal. By next April, Atari may have available the first Motorola chip-based UNIX network to sell for a four-digit figure.

What the press releases don't tell you...

At the Summer CES in Chicago last June, our staff probably took home enough press releases and news material to be recycled into an entire edition of the Sunday *New York Times*. I personally thought the odds of finding several new ST software releases missing from the seemingly infinite pile of news was less than the lowest number in the ST's double precision. One quick check of a software distributor's dealer catalog proved me wrong. Here are some of the new items we did *not* see in Chicago:

Portal, by Activision, is a graphic adventure game by Rob Swigart and Brad Fregger. In it, you portray an astronaut having returned to Earth—or what seems like Earth—after a long mission, to find all the people missing. Buildings, animals, birds, trees, lakes are present; only the people are gone. They were thoughtful enough to leave an artificial intelligence named Homer (I hope he's no relative of "Eliza"), who isn't quite sure what happened either, but can provide you with *some* clues.

You travel through a city that looks like a sadly vacated metropolis from Sundog, using Homer's clues to determine how to bring all the people back. Trouble is, I predict, they may be having a party someplace. They may not *want* to come back.

Tracker, from Firebird, is a more tactical adventure game, in the genre of Mercenary. You're commander of eight TRAC (Terminate Renegade Artificial Intelligence) zero-gravity, inner-atmospheric fighters. Your mission: liberate Zeugma IV from the menace of robotic Cycloids being controlled by some omnipotent, dictatorial artificial intelligence force—which we hope is no relative of Homer.

The planet is divided into twenty-two sectors, each of which has detailed terrain characteristics. Unlike other tactical games, it gives you the option of controlling all eight TRACs by "remote control," or entering any one at any time and piloting it manually from a first-person viewpoint, as in Starglider. The objective is to systematically disassemble the Cycloid power structure. The game promises to use strategic algorithms for enemy movements, so it actually responds to your decisions, rather than just going about its own business.

I have yet to see a Firebird/Rainbird game that's anything less than quite good. I have a feeling I won't be disappointed.

Mindscape has two attractive new entries: **Plutos** and **Q-Ball**. Plutos is a Galaga/Xevious-style arcade game which is rather colorful, its package as well as screen.

Q-Ball, written by a person named Adam Billyard, is a British import from English Software—the pun was obviously intended here, too. A three-dimensional game of snooker, its billiard balls are not affected by the laws of gravity. Instead, they're suspended in space within a box whose eight corners serve as pockets; otherwise, the rules of snooker apply.

on gaming

Matthew J. Costello

You just have to believe me when I tell you there's a lot of boring, computer games out there. Sometimes, when I survey the stacks of games selling for $30-$40, and their general lack of interest, I get a bit depressed. I mean, I get all the stuff for free and a lot of it isn't even worth the time to play it, let alone the expenditure of cold cash.

Oh, but that's where I get to perform my public service. Namely, to pick out the goodies from Silicon Valley that might actually be fun.

Which brings me to *Portal*. Now *Portal* ($39.95), released by Activision (2350 Bayshore Parkway, Mountain View, CA 94043), who broke new ground with the innovative and dryly humorous *Hacker I and II*, has arrived. It is a multi-disc, mega-adventure that, incredibly, grows more intriguing as you play it.

Portal comes on three discs that should keep you hacking away at your keyboard for a long, long time. The prologue presents the basic situation. . . . It's the end of the 21st century and you have returned from a long space journey to a completely devastated planet earth. Cape Canaveral is an overgrown meadow, cities have disappeared, with the streets of Manhattan littered with abandoned vehicles. You discover that everyone had moved underground—but there's no one there either, just endless empty corridors. Then, just as your own computer is informing you that your psychological adjustment is in peril (due to lack of human contact), you discover Worldnet—a world-wide informational mindlink, restricted to those approved by Intercop. But a manual tells you that access is allowed in case of a catastrophic failure, including everything from induced madness in the local Artificial Intelligence to a new viral intrusion into the organic pico-electronics.

But since over eighty-eight years have passed since you left the planet, it's all foreign to you. Nevertheless, using an "archaic manual input device" instead of a direct "mindlink," you enter the Worldnet.

There are 12 icons, representing different data spaces that you can enter. The most important is Homer, the storytelling artificial intelligence. Homer recalls little at first. After all, a major calamity has occurred destroying the system and life on the planet.

At least, you *think* all life on the planet is gone.

Gradually, Homer begins to rebuild part of his memory, and directs you to the History Data Space where the strange events of the last eighty-plus years are teasingly revealed. The development of genetic disease. The Vega Expedition. The movement to live underground. The wars. And ultimately a name. Peter Devore.

ON GAMING
Continued from page 122

It appears that Devore, having shown no unusual abilities, was mistakenly routed to Psilink, a highly proscribed data space restricted to carefully screened candidates of unusual paranormal abilities. Just another bureaucratic foul-up.

But it is one that has tremendous implications for the entire Worldnet, Intercorp, and the future of the planet.

The only thing is, you don't know what they are.

So you investigate other data spaces, searching in Psychology, Life Support, Scitech, Edmod, and others. Some are, at first, empty, though you are encouraged to try again. But you find that you have more information than you can deal with. There's the genealogies of Devore, information on someone named Regent Sable. And then information on an ominous character named Dittmore Gadd.

You come across their psychological data, complete with charts of their EKG, logical abilities, ESP, and a thorough display of each person's core Intelligence.

But why? Why all this information? And what are you going to do with it? And who is Devore and why does Homer (named for his Heuristic personality) keep going back to him, even as you start to uncover the rest of the history of the 21st century?

Because, you see, Peter Devore discovered the Portal.

And then you're one small step closer to understanding what happened to the planet. Where everyone went . . . And who, if anyone, is left.

Portal, is, quite simply, a breakthrough game. If most puzzle-oriented text adventures leave you cold, this one grabs your little grey cells and teases them. The game, through Homer, continually interacts with the player, announcing new files as they are made available, offering pieces of narrative that reveal more and more of the story of the Portal.

And the amazing thing, friends, is that I've only been through the first disc of the *Portal*. There're four more sides of who-knows-what waiting to be discovered. Maybe I'll find out that I'm not alone on planet Earth.

And won't that be fun? ■

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Portal

A Audio/video

Accolade golf game slices on one computer

By Steven Kosek

NEW SOFTWARE

This is probably not the best season of the year to rave about a computer golf game. Real golfers are strolling the fairways, breathing fresh air, getting exercise. As for me, I'm lounging at my desk, and exercising my index finger with "Mean 18," a golfing simulation from Accolade Entertainment Software.

Actually, "Mean 18" has been around for a while now, but I

lem with games on the IBM PC. I suspect the original "Mean 18" looked better on a PCjr or Tandy 1000, which can display more colors at one time than a standard IBM PC, but I've never had the opportunity to confirm that hunch.

On the other hand, I know for a fact that "Mean 18" looks and plays great on both the Commodore Amiga and the Atari ST. Since giving the game a second chance on those machines, I've become a regular armchair duf-

wasn't very impressed when I first saw it last year on an IBM PC. With miserable graphics and four measly colors, it was hard to see the ball or even read messages displayed by the game on-screen—in short, it was a constant strain on your eyes and not worth the effort.

Of course, that's often a prob-

but birdies on two others

fer. Playing on the Amiga is particularly fine because "Mean 18" takes advantage of the Amiga's sound chip to produce realistic sound effects, including the "whoosh" of the swing and the groan of the crowd when your ball skims the rim of the cup on an easy putt.

"Mean 18" includes plenty of options. You can practice a particular hole, work out on a driving range or polish up your putting skills. One to four players can play at one of two levels of difficulty, and you'll find a full set of clubs to choose from on each stroke.

The basic game package comes with four courses: Pebble Beach (California), St. Andrews (Scotland), Augusta National (Georgia) and Bush Hill (an imaginary course). A course-architect facility allows you to design your own course if you wish.

In addition, Accolade publishes a series of supplementary diskettes that let you play on other well-known courses. "Famous Course Disk: Volume II" is available for both the Amiga and Atari ST and contains the greens of Turnberry (Scotland), Inverness Club (Ohio) and Harbour Town (South Carolina). Volumes III and IV arrived recently with six additional courses for the IBM, but I'll wait for Atari or Amiga versions before I give those a try.

"Mean 18" is $44.95 for the Atari and Amiga. "Famous Course Disk: Volume II" is $19.95.

This summer, Accolade will release "Mini-Putt," a lighthearted miniature golf game for the Commodore 64/128. Like its more serious predecessor, "Mini-Putt" allows up to four players and includes a variety of courses. But the courses reflect themes ranging from famous movies to classic video-arcade games; naturally, those courses include the windmills, bridges and pop-up barricades you'd expect in a miniature golf game. "Mini-Putt" will retail for $29.95. For details, contact Accolade at 408-446-5757.

Stranger than fiction

Rob Swigart is the author of several comic novels, including "The Book of Revelations," a sexy pop-culture fairy tale. His first computer adventure, on the other hand, is an unusually serious work of science-fiction mystery called "Portal."

First released last Christmas for the Commodore 64/128, "Portal" tells the story of a grand migration of the Earth's population to an alternate universe. You play the role of an astronaut returning home after a long voyage only to discover an empty home planet. Your single link to the past is Homer, an artificial intelligence residing in a worldwide computer system.

Unlike text adventures, which normally engage the player in a series of difficult puzzles, "Portal" asks the reader to explore the massive databases of Homer to discover the whereabouts of Earth's former inhabitants. Your own computer keyboard simulates the electronic link to the world computer.

Be forewarned that "Portal" is a complex and time-consuming game that requires a different approach than most other computer fictions do. In the beginning, Homer seems somewhat incapacitated, unable to provide much information. As you explore the data available, however, more information becomes accessible, each piece leading to the others you'll need to get the big picture. The complete story resides on three diskettes.

First released last Christmas from Activision for the Commodore 64/128 ($39.95), the program has since been made available for the IBM PC and Apple II computers ($44.95). Last month the Macintosh version arrived ($49.95); Atari and Amiga versions are still on the way. For more information, contact Activision at 415-960-0518.

Have a question about home computing? Address it to Steven Kosek in care of Friday Audio-Video Section, The Chicago Tribune, 435 N. Michigan Ave, Chicago, Ill. 60611. Questions of broadest general interest will be considered for future columns.

Critically Speaking...Commodore 64 Compatible

boats and sails. This approach makes the visual representation of sailing much easier to understand than it would have been with solid sails and boats. The combination of recorded tutorial, program, and detailed instruction booklet provides a very good introduction to the techniques of sailing. The variety of courses and motorboat option provide a nice variety, and the two-player, long-distance option is a welcome bonus. (Solo or competitive play; Keyboard; Optional Commodore 1660 modem.) C64/128 version reviewed; also available for Apple II and IBM at $39.95.
Recommended for sailing buffs. (MSR $29.95)

GFL CHAMPIONSHIP FOOTBALL (♦♦♦/♦♦♦♦) is here Sports fans and, thank goodness, it's not like any other football game already out there (and there's a bunch!) *Gamestar*, known for their fine sports games, has really come up with a humdinger! As we often do, the program was initially booted up without looking at the directions just to get a feel of how hard or easy the program is to get into. As a result, we were not prepared for the first tackle! Here you're *in* the game as the view is right down on field level *from your eyes!* In other words, that tackle came flying right out at us (we thought, for a second, he was going to jump out of the TV and knock us to the ground!)

Loads of Play Selections
Once you've chosen one- or two-player mode, you'll be asked to draft a team. The choice is made from 28 teams divided into four divisions, ranked in eight categories according to the skills of the players and coach. Then it's on to the play selections where you'll choose from many offensive plays including sweeps, traps, passes, draws, flags pass patterns, and more. Your view of the field depends on the play selected. In other words, if you've chosen a pass pattern, all you'll see of "yourself" is the receiver's hands as he's going for the football, as well as the two defenders--a cornerback and free safety who will run the pattern with you, attempted to intercept or knock the ball down. The various pass routes are included in the documentation and there are arrows at the bottom of the screen to help teach you the routes by pointing in the direction you should be going. By the way, once you've chosen the play, you still have four seconds at the line of scrimmage to change the play via an "audible".
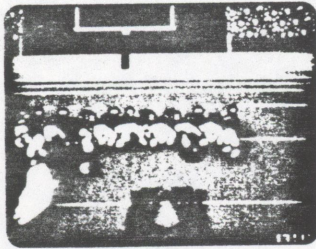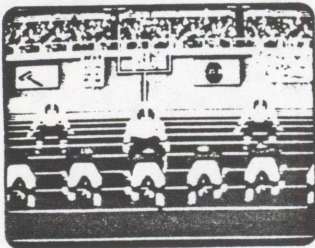
Defense, Defense
As on the offense, you'll have plenty of play options to choose from. You can set up a "nickel," run a "blitz," shift your men, etc. Unlike the offense, however, the computer will control your men in the play once you've chosen your defense. Once the play is finished, you'll return to the statistic screen where you'll be able to see how many yards were gained or lost, down, yards to go, as well as (if you've chosen the feature at the beginning of the game) "Feedback." If you've chosen this option, the offensive and defensive plays just executed will be highlighted--with their results--allowing you to learn which offensive plays work or don't work against various defenses.

Very Exciting
The first-person perspective of this game gives it its uniqueness; however, even that aside, this is a fine football game. It requires a good deal of skill and you'll derive great satisfaction with the wide choices available--you'll truly feel as though you're playing and coaching the game. The graphics are colorful, crisp, and up to the usual Gamestar excellence. Three cheers to designers Dennis Kirsch, Mark Madland, and Scott Orr for taking an over-saturated computer game, and bringing new life to it! (*We can't wait to see the Amiga and ST versions!*) (one-player; two-player simultaneous; joystick required; reviewed on Commodore 64/128; coming for Apple & IBM at $39.95, Amiga and Atari ST)
Recommended (MSR $34.95)

BACK ISSUES AVAILABLE...
Don't miss out on all the great back issues! We've been covering the computer and dedicated game field for five years. Most issues are still available (none left of Vol 1, #1,2,3). Send $2.00 for each back issue you want. Buy six or more, and they're just $1.50 each. Make certain you have a complete set!

PORTAL: A COMPUTER NOVEL (♦♦♦/♦♦♦♦) was conceived by Brad Fregger of *Activision* in collaboration with adventure and science fiction writer, Rob Swigart, as "the first true piece of computer literature, in which the player is in large part the author." As such, PORTAL is an experiment, a new software direction, for it is definitely NOT a role-playing adventure in the sense that we now understand that term. It is certainly interactive, but in a way that previous text or graphics and text games have not been, and in a way that books or movies could never be. It does not rely on winning battles, physical exploration of territories, learning magical spells, solving puzzles, or developing characters to the umpteenth level in order to grab and hold the player's interest. Instead, PORTAL tells a story which unfolds in layers like the unfurling of a budding rose. But the exposition of those layers is under the player's control, in terms of both sequence and depth of exploration.

Prologue: Earth without People
The background of this futuristic computer novel is contained in a Prologue supplied with the multi-disk program. The main character is a space traveler returned to Earth in the year 2106 after a flight that never reached its goal of 61 Cygni. That flight left in 2004, its lone explorer put into cryogenic sleep for the long voyage. The explorer awoke as the spacecraft came in over the South Atlantic, landing in Florida at what was Cape Canaveral. Alarmed at grassy fields and launch facilities in poor repair, the explorer soon discovered that there were no people there or anywhere else on Earth. Attempting to find out what happened to all the people, the explorer finally discovers a single operating terminal connected to the 12 Worldnet databases. At this point, you become that frightened and lonely explorer.

Exploring Earth through Worldnet
Signing onto Worldnet, customarily accessed through Mindlinks, you must resort to the primitive input devices of the late 20th century: joystick and keyboard. At first, only the tiniest stirrings in the Central Processing database are detectable, which provide emergency instructions. Next, Homer comes alive. Homer is a biological computer designed as a storytelling artificial intelligence machine, and he reports that yours is the first active terminal in 12 years. All other databases (History, Military, Psilink, Scitech, Geography, Med10, Psychology, EdMod, Life Support, and Wasatch genealogical) are reported to be temporarily empty. But Homer seems to need human companionship as much as you do and begins to remember scattered bits of information long inactive in his memory. Something about your probing seems to arouse the cobwebby links to other databases in Worldnet. Slowly, as you keep trying for access, tiny snippets of information are revealed. You grab at them hungrily, hoping to learn why the people are gone and if it might even be possible to bring them back. Med10 tells you about the new genetic diseases. And Homer remembers a name, Peter Devore, who seemed to be linked to the disappearances. History files open, revealing events of near and distant past. As you chase from database to database, Homer flashes his icon excitedly when he recalls something, leading you to more knowledge gained in agonizingly small chunks. The Vega myths. The Migration. Mozarting. And the Portal: possible mathematical manipulation of psychic space? You can't stop, for uncovering the mystery has become a joint obsession for you and Homer.

Hooked within Minutes
PORTAL is one of the most fascinating pieces of software we've explored in quite a while. We had our doubts about something that acts and looks a little like a standard computer adventure but contains no puzzles or tasks for the player. It turns out that straightforward exploration among the vast databases of an imagined 22nd century culture, combined with a totally gripping story, had us thoroughly hooked within ten minutes of play. We had no difficulty becoming that lonely space traveler and feeling the urgency of finding the lost people of Earth. Even without puzzles and tests, we pushed on through the immense program. After just under three hours of poking and probing, we were directed to insert side two of five sides, so we still have many more hours of exciting exploration ahead. The Activision team is to be congratulated for their boldness in bringing PORTAL to reality. It takes a certain amount of courage to chart a new course and test untried waters, but products like PORTAL help entertainment software to grow in new directions. (Solo play; Joystick; 3 disks.) Commodore 64/128 version reviewed; coming soon for Amiga, Apple II, Atari ST, IBM PC/PCjr/Tandy 1000, Macintosh. (Pricing for systems other than C64/128 unknown at this time.)
Recommended. (MSR $39.95)

Stadium Disk Ships
SubLogic has just shipped their **Stadium Disk** to be used with *Pure-Stat Baseball* (Commodore 64/128) which features twenty-six ballparks. Statistics such as distances to the fences, wind factors, etc., are factored in for a realistic approach to each stadium. In addition, background information on each park is included, such as year built, any nicknames, etc. Retail for the disk is $19.95

Name:	Portal
System:	Apple, Amiga, Atari ST
	C64, IBM, Mac
Price:	$44.95 to $49.95
Designer:	Rob Swigart
Publisher:	Activision
	Mountain View, CA

PORTAL
A Very Novel Game
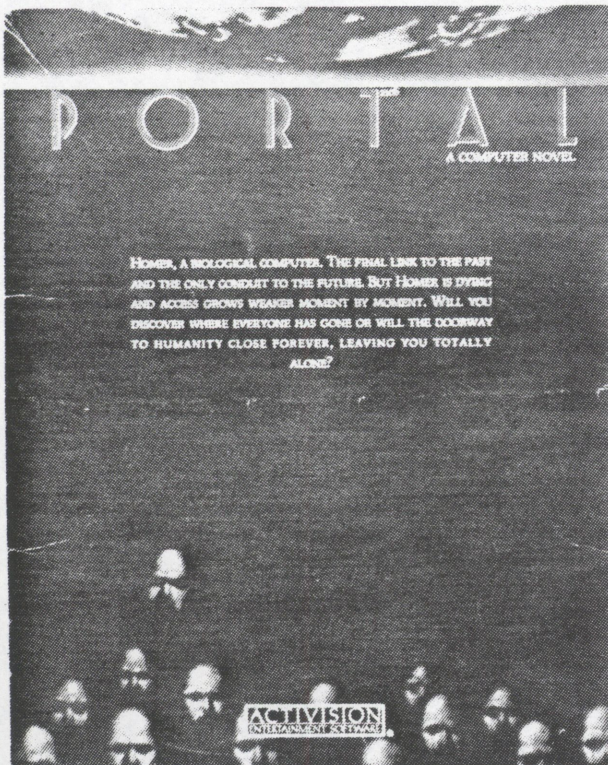
by Roy Wagner

Portal, from Activision, is an outstanding computer "novel," the first *real* computer novel. It is *not* a game because your only involvement is selecting from 12 data storage access channels and reading the information therein contained. There are no puzzles or arcade "action". The story line evolves as you access more and more information. It does not vary based on any of your actions.

The story takes place in the year 2106. You return to Earth to discover that there are *no* people. An on-line computer terminal provides you access to the last fragments of "recorded" history. Several computer systems, many dormant, are activated in the course of play. Your only major link to these systems is an artificially intelligent interface called 'Homer'. This interface is the "storyteller" that takes the factual data that you access, pieces together the details, and reveals the mystery of where ALL the humans on Earth went and why.

The story is interesting and well written, and well it should be, having been written by Rob Swigart, a noted science-fiction writer (See Wasatch File on Rob Swigart). It is a *long* story, using three Amiga disks or (five Commodore 64 disk sides). Rob has estimated that it is the equivalent of a 65,000 word novel. It is a classic tale of a benevolent future society gone bad, a story of adventure, mystery, suspense, love, and plausible scientific fiction.

The interface used by the game designer is tedious at times. There are twelve different access options that must be checked for the availability of new information. Your computer mentor, HOMER, frequently helps by connecting data and events within the story telling and often points you directly to certain data areas.

The problem that occurs with the interface is two-fold: 1) if you do not know which areas you

and identifies your primitive communication interfaces.

With a little bit of "hacking" (the only real challenge), you are provided with some "online HELP" to explain your means of interfacing with the various data areas (C64 version only). The Amiga interface is "intuitively" obvious.

Until you have accessed factual data, 'Homer', the key access area, cannot continue to tell you the story. Most of the data is found in only three of the twelve data areas; Central Processing, SciTech, and History. Secondary areas are PsiLink, Geography, Med10, and Military. Psychological, Life Support, EdMod, and Wasatch (which provide only superficial gloss).

As you begin your reading, most of the data areas are empty. The story is slow to begin, but once it gets going there are several subplots running at the same time. The reading takes on the anxious persistence of a book that cannot be put down. Just one more message, just one more data item, just

one more check to see what HOMER has for me. Believe me, you can get involved in this story and you won't finish it quickly. It will take you several days of reading. Gee, maybe I can finish reading this disk tonight.

When you are ready to finish a day's reading, be sure to save your current set of accessed messages. Then just take the current disk from your computer and turn it off. I often found myself leaving the computer on so that I could just pick up again from where I left off without restarting.

If you enjoy reading *good* science fiction and want to participate in the reality suggested by the science fiction of less than fifty years ago, that of using computer to tell a story as it could never be told before; then *Portal* is for you. If you enjoy computer text adventures for their stories, but don't really enjoy their puzzles; then *Portal* is for you. If you want to see outstanding computer graphics and sophisticated computer programming; then take a look at *Portal*.

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Priority

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products that stretch the graphics
and sound capabilities of a machine
and provide a rich and creative in-
tellectual challenge or a demanding
test of reflexor.

In those areas, a variety of new
programs were announced at Win-
ter CES. In fact, games comprised
the lion's share of new product of-
ferings for Commodore. As many

industry leaders observed there,
computer games seem to be enjoy-
ing a resurgence in popularity.

The following software pro-
grams were among those intro-
duced at CES. Look for information
on more new software in upcoming
issues.

* * * * * *

In Accolade's Comics, you take on the
persona of Steve Keene, and help thwart
evil for the Chief of Spystuff, Inc.
Detailed graphics and animation and a
user-directed plot make this entertain-
ment experience similar to directing the
action in a comic book.

Accolade

This entertainment software pro-
ducer, which celebrated its first
birthday at the show, announced
Accolade's Comics, an interactive
computer comic book. The story
centers around Steve Keene, a spy
whose mission is to foil evil plots
for the Chief of Spystuff, Inc.

Unlike text-only adventures,
Accolade's Comics offers the visual
experience of reading a comic book
on a computer screen, combining
detailed graphics and animation.
The player determines the direction
of the story by continually selecting
from a series of possible answers to
questions asked of Keene. Some are
dead ends, and others lead the player
into various themes and plot twists.
Because the user directs the plot, a
variety of different endings are pos-
sible each time the game is played.
Arcade action is incorporated when
Keene falls into traps, inescapable
positions, and embarrassing situa-
tions. The game retails for $39.95.

Accolade
20833 Stevens Creek Blvd.
Cupertino, CA 95014
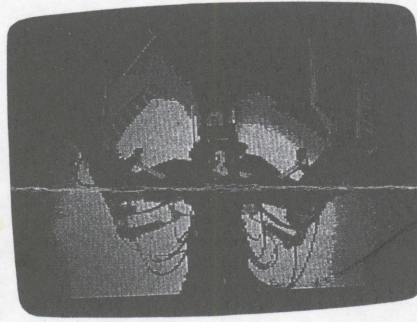
"Leave her alone, you...." Last summer's
hit movie Aliens provides the characters
and story for one of Activision's latest
releases, Aliens: The Computer Game.

Activision

Two years in the making, a graphics-
and-text adventure titled *Portal*
made its debut at CES. Rather than
using a puzzle-solving or branching
story approach, *Portal* is narrative
literature, allowing the player to in-
teract with the story and explore the
unfolding futuristic world.

Transported to the year 2106,
you are a lone space traveler who
returns to earth and discovers that
all of its inhabitants have vanished.
Together with the sole survivor, a
biological computer named Homer,
you must find out why. Activision
worked with adventure and science
fiction author Rob Swigart to devel-
op this unique approach. Suggested
retail price is $39.95.

Another new game introduced
by Activision is *Aliens: The Com-
puter Game* ($34.95), based on last
summer's hit movie.

Activision
2350 Bayshore Pkwy.
Mountain View, CA 94043

Electronic Arts

Long a leader in discovering soft-
ware-design talent, Electronic Arts
has expanded its multimachine line
of computer software and has intro-

---

duced several new products for the
Commodore 64.

Dan Dare: Pilot of the Future is a
best-selling British import featuring
Dan Dare, the U.K.'s most popular
comic book hero. The game follows
the adventure of Dare and his en-
gaging pet, Stripey, as they travel to
a distant asteroid and neutralize the
threat posed by alien Treens. Each
screen is a comic book panel com-
plete with captions, full-color 3-D
cartoon graphics, mazes, puzzles,
fistfights, and a realistic sound-
track. Suggested retail price is un-
der $20.

In *PHM Pegasus*, a combat sim-
ulation game, players complete a
basic hydrofoil training session and
become part of the T.A.G. (Terrorist
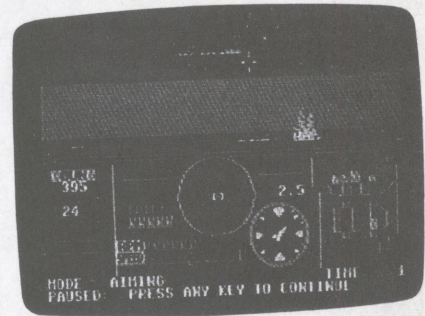
Commodore 64 games have been a
mainstay of the Electronic Arts product
line. Among those new products an-
nounced for the 64 at CES are Dan
Dare: Pilot of the Future and PHM
Pegasus.

Portal

This product, for the Commodore 64, is a computer novel different from any other computer novel on the market. Barely interactive and completely joystick-controlled, *Portal* is closer than any software yet produced to the experience of sitting back and reading a novel.

Portal places you in the twenty-second century. As the five-page printed prologue explains, you are returning to earth from a failed space mission, but things at home are not quite right. To be more specific, the planet has no people on it. But there's been no nuclear holocaust, and nowhere are there signs of widespread disease. Instead, the human race has simply disappeared.

Your only link to the past, and thus your only chance of discovering what happened, is a Worldnet computer terminal. Beside the terminal you have found a set of operating instructions (included in the package) with only minimally helpful information. That's it. Somehow, you must try to find out where humanity has gone.

Portal's display is a series of 12 boxes, each with its own graphics design. The boxes represent databases within the Worldnet computer. These databases (or *dataspaces*, as they are called) contain whatever information Worldnet has on the events and characters within the game. For example, the Psychology, Life Support, Wasatch, and Edmod dataspaces contain data about each character that appears in the story, while the Military, SciTech, PsiLink, Geography, History, and Med10 dataspaces store scientific, technological, social, and historical knowledge. The most important of the dataspaces are Central Processing, which offers vital information not found in the other dataspaces, and Homer, the story's narrator.

Homer is Worldnet's "storytelling artificial intelligence." What this means, from your point of view, is that Homer is the dataspace that will recount the tale of what has happened to the human race. As the story progresses, Homer requires information from all the other dataspaces, in order to construct the story of the Portal. Your task in the game is to search through the other 11 dataspaces to retrieve the information for him.

To get this data, all you do is move from dataspace to dataspace (via joystick), entering each dataspace, and reading what has been stored there. After doing so, you return to the Homer dataspace and read the files Homer has created as a result of your searching. These files reveal Homer's story and, just as importantly, his concerns as storyteller. Throughout the story, Homer interrupts the narration to reveal his

doubts about his storytelling abilities, his concerns about humanity, and the nature of truth in fiction.

Portal is, in fact, as much about Homer as it is about Peter Devore, the leader of humanity's Migration. Through a complex and often bizarre plot, one that begins with a simple technological error, Peter Devore enters the wrong dataspace and discovers things he should never be allowed to know. Among these is knowledge of the personality of Wanda Sixlove, a passenger aboard a space ship light years from earth. Through a series of mindlinks, Peter and Wanda fall in love with each other, and Peter spends the next several years trying to find a way to be with her. Somehow, in a way you must discover, that search is bound up with the disappearance of the human race.

The story itself is very good. Extremely well-written, with an intriguing plot, *Portal* offers some of the first truly excellent fictional passages seen on a computer to date. Reading Homer's narrative is a pleasure: The characters are fairly complex and highly believable, and the plots and sub-plots are well-managed. Homer does not tell us everything—what he leaves out we easily fill in for ourselves—but what he does tell is fascinating from start to finish. And the most interesting part of all,

the feature that sets *Portal* aside from all other interactive fiction, is that we can see precisely how the story unfolds.

When done properly, interactive fiction makes us feel as if we are contributing to the story. Unlike books, which contain a story that we simply accept from one page to the next, interactive fiction demands that we participate in the creation of the plot. Also unlike books, we never know when the story will end. In interactive fiction, there is no last page.

Extremely well-written, with an intriguing plot, Portal offers some of the first truly excellent fictional passages seen on a computer to date.

To reach the conclusion of most adventure games, we must take the role of a character in the story and, by wandering around, talking to other characters, and solving puzzles, force the

story towards its conclusion. In one way, such participation is satisfying, because we are allowed to directly influence the plot's outcome, but for those who like reading books, the sheer length of the adventure can be frustrating. *Portal* solves this problem in two ways. First, you are not part of the story of the Migration. Second, you don't really change the course of the plot.

In *Portal*, your only function is to get Homer the information he needs to tell the story. Then, for the most part at least, you sit back and read. As simple as this sounds, though, your actions in the game—going from dataspace to dataspace—are the game itself. You are not a character in the story, but instead you are watching the process of the telling of the story. Each piece of information you dig up is necessary to Homer's narrative; once you have found the information, you return to Homer and discover how he has put it into the story. In other words, you watch the story write itself.

Those expecting a graphics-and-text adventure along the lines of *Tass Times in Tonetown* will perhaps not appreciate the lack of direct participation in the plot, while those who want a graphics adventure such as *Ultima IV* will not enjoy the absence of role playing or the short duration of *Portal*. *Portal* can be completed in about the same length of time it takes to read a fairly long novel. Like all adventures, it is of limited usefulness after its completion, but unlike most, it can be reread with enjoyment.

Still, I recommend *Portal* with some reservation. If you want to see what can be done with a computer story, by all means pick it up. If you want a lengthy adventure with elements of role play, however, don't. *Portal's* strength is its realization that text adventures don't really take the place of a good novel. It bills itself as a computer novel, and that is precisely what it is. Perhaps a little expensive for a novel, *Portal* offers a reading experience that is unique in computerized fiction.

—*Neil Randall*

Activision
2350 Bayshore Frontage Rd.
Mountain View, CA 94043
$39.95

Photo courtesy of Activision

EXPLORING THE BRAVE NEW WORLD OF THE ELECTRONIC NOVEL

Little America, Rob Swigart's first novel, was the kind of book that appealed to me in many ways. It was zany, its title was the name of the country's largest truck stop (Little America, Wyoming), and its hero was constantly trying to kill his father, like some spaced-out version of the ancient Greek king Oedipus. It was filled with ideas, social commentary on contemporary life, and kooky people. And then there was that special, secret-recipe sauce for the fast-food hamburgers.

I first met Rob shortly after I'd fin-

Portal's author, Rob Swigart, explains why it is not a text adventure, not an interactive fiction, but an "electronic novel"

ished reading *Little America*. He was autographing copies in the University of Oregon bookstore. I was in the book publishing business at the time, April

29, 1977.

Little did either of us know that, almost ten years later—to the day—we'd meet again.

This time in New York.

This time with the computer in common.

For, five books later, Rob Swigart, who teaches creative writing at San Jose State University, has created a "computer novel" called *Portal*, published by Activision. It's unlike any adventure game or interactive fiction or whatchamacallit you've ever slipped into a disk drive. No kidding.

Jack B. Rochester is a professional writer and a contributing editor to *Computer Update*. Copyright 1987 by Jack B. Rochester.

Portal is a science-fiction novel that you read—or experience—on the screen of your personal computer. The action begins in the year 2016; you, the player, are a solitary space explorer who had departed in 2004 aboard the spacecraft *Gyges*, heading for 61 Cygni, on an extended exploration. Something happened to abort the flight, and you've returned to earth. This and more you learn in an eight-page "Prologue." An excerpt:

But I awoke (it seemed) moments after I'd gone into the cryofield—200 million kilometers from Earth, inward bound—and everything has changed.

Manhattan is a monument. The triangular mile-high pyramids of midtown still stand, but they're empty. The lower East Side is a vast field littered with abandoned vehicles of types I have never seen.

. . .Then, in early June, I found an entrance.

Everyone had moved underground. Of course that movement had begun before I left, but I had had no idea it would be so extensive. The world has been reforested.

. . .I walked into old Chicago. The access lock to the dome stood open. Ancient computer printout littered the street.

. . .On the second level I found a terminal with a small ready light burning. Nearby I found the "Worldnet Emergency Operating Instructions."

The instructions tell me what to do if my mindlink is not functional. I don't know what a mindlink is, but I assume it must be adapted to my own mind, and this has never happened. So I will read the instructions, and then I will try to find out what has happened to the world, where the people have gone, and if I must remain alone for the rest of my life.

Gyges tells me my psychological adjustment is in peril. I have been too long without other people.

These excerpts give only some of the flavor of *Portal*'s rich futuristic detail. It's evident from the first screen that appears when you start "play." Overlaid on a digitized map of the world is a message screen that asks you to identify yourself, either with your DNA number or your name.

Rob explained a little of how he

created *Portal*'s futuristic world over lunch—at a place called The Saloon, with waiters zooming past on roller skates—with Bill Holt, Activision's roving user group ambassador, and Loretta Stagnitto, its public relations manager.

"I spent a lot of time just creating the outline of major historical events for the next 120 years, with only a vague idea of plot," he began. "The ideas came from research for other books (such as *The Time Trip*, published in 1979) and from some scenario-writing I'd done for the Institute for the Future (Menlo Park, California). I'm interested in how people *think* about the future. First of all, it doesn't exist, so anything you say about it is fiction. Second, we spend the rest of our lives in it, so you have to think about it to some extent.

"*Dune* (the series of novels by Frank Herbert) creates a world. Despite not liking Herbert's writing a lot, it's an historical drama set in the future with action, sex, and interesting characters. I've read some of his books three or four times. *Portal* for me was a lot like that, speculating on the future, creating a world."

For you, that world is a computer terminal screen (described in detail in the "Worldnet Emergency Operating Instructions"), upon which you see the *interface panel*, 12 graphic representations of *dataspaces*. Some of these dataspaces are Central Processing, Psychology, Life Support, Psilink, Med10, and Scitech. And Homer.

You can move into and out of these dataspaces by pressing the cursor keys or by using a mouse. (*Portal* is available for most popular computers.) There's information here that you must acquire, yet sometimes a data crystal is inoperative or you lack the proper password to get into a particular dataspace. And then there's Homer.

Computer game evolution. We

talked a lot about entertainment software over lunch. Loretta said that the trend these days is toward "creativity programs, like playing music, or desktop publishing or drawing—software that *makes* something. And sports games."

But, Loretta said, few software packages achieve what would normally be considered bestseller status, according to the Software Publisher's Association. The all-time bestseller is Broderbund's *Print Shop*, which has sold over 500,000 copies. Infocom (now owned by Activision) has two "platinum" titles that have sold over 250,000 copies, both text adventure games: *Zork I* and *Hitchhiker's Guide to the Galaxy*. Text adventures in the 100,000 category include Activision's *Hacker* and Infocom's *Suspended*. Entertainment software generally has a very short life, determined by the retail stores. Bill Holt says he visited 175 stores in 1986 and found that games seldom stay on the shelves for more than a few months—unless, of course, they're among the bestsellers.

Bill described game evolution this way: First there were the hand/eye coordination games that used joysticks. Then there were puzzle and gameboard games, followed by strategy and quest adventures. Then these were combined into mission-plus-hand/eye coordination games. Then we got text adventures, short and long problem-solving games, and graphics-and-text adventure games. With these latter, Bill says, "Anything can happen to you. But with *Portal*, nothing can happen to you. *Portal* is a bridge product, where all other terms used to characterize games overlap."

What, then, *is Portal*? A text adventure? An interactive fiction? Swigart prefers the term *electronic novel*, and for a sound reason. *Portal* is a database program, not a parser-based program. "The computer is designed to process information," he says, "and most of the information we get is text-based. Most of the games the computer has generated in the past ten years are graphics-based.

"Infocom made a big deal out of *text-based* games, but they're still puzzle-solving. You're following the programmer though his or her own thought processes, playing 'Guess the Parser.'

"We have friends whose son is a

game tester for George Lucas, who was winning games and contests all the time, racking up enormous scores.'' Rob says, ''To do this, he analyzed the flowchart of the program. A text-adventure game is similar to following a flowchart.

''But Portal is no puzzle,'' Rob says. ''It's not problem-solving for the user. It's information processed and presented to the user in a factual way. I didn't want an interactive game with branching, or even with a story that's different every time you do it. I wanted a story that would be told through the medium of the computer. It's an expansion of the traditional novel.''

Rob Swigart, with a B.A. in English from Princeton, a Ph.D. in comparative literature from the State University of New York at Buffalo, and five novels under his belt, knows what he's talking about in this respect. ''There are different rhythms and sequences in the computer novel. I can imagine when Samuel Richardson wrote Pamela (written in 1740 and considered the first 'novel.''), people were saying, 'What in the hell is this? A big long book full of fake letters? I'm not interested in this! I want to read romances about Sir Gawain!'

''Forms are different today, too. We don't have timeless rhythms in our lives any more, like people in, say, medieval society. The Church isn't the central point of the village. Our years don't repeat the agricultural cycles.''

The more Swigart talks, the more you see that whether it's his latest print novel, Vector, or his contributing to the concept for Activision's popular Hacker, or his electronic novel, Portal, his ideas and imagination constantly rail against conventional notions.

''Infocom games are tongue-in-cheek,'' he says. ''There's a script and lots of jokes, and people who enjoy these kinds of puzzles learn over time the mindset and start anticipating what they have to do.

''I've never wanted to put in the time to learn that. The payoff isn't there for me. The story itself is pulling you through, not finding the keys to the puzzle.''

Bill Holt concurs. ''With text-adventure games, you're always reacting. You aren't assertive. There are things that are arbitrarily right or

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His ideas and imagination rail against conventional notions.

''Playing'' *Portal.* My 13-year-old son, Joshua, and I spent many hours, fascinated, with Portal (it takes 20 to 30 hours to work your way through). You move from dataspace to dataspace, picking up valuable pieces of information, reading files, figuring out what happened to the people of Earth. You never input text; there's no responding to the parser with ''pick up knife'' or (go) ''East.'' You read, like you would a novel; you try to understand the information the files in the dataspaces are providing, like a detective; and you try to figure out where to go next for more information. Sometimes the information is superfluous; sometimes it's a gold mine that unlocks another dataspace. Gradually, you learn there was someone named Peter Devore, who accidentally discovered a certain something about Psilink and Scitech. There were migrations, sicknesses. By this time, the pseudosciences have grown up: There are mindlinks with computers, telekinesis, clairvoyance, and new medical technologies. You learn there was an androgynous grandmother who figures centrally in things. There's something curiously called ''mozarting.''

And, of course, there's Homer. The graphic depictions are excellent, as is the user interface—the program is intuitively easy to manipulate. And along with the compelling story of the portal you're seeking, that you hope will ultimately lead to uncovering the mystery of Peter Devore and the lost civilization of Earth, your interest is kept very much alive. Bill Holt tells of an Indiana text adventure group that thought at first they

wouldn't be interested in Portal, but in short order found they couldn't leave it alone. A bridge, indeed.

Rob Swigart's interest in computers goes back to 1976. His first was an ETC 1000, made by the Electronic Tool Company. ''It had 16K, a hexadecimal keyboard, a 6502 processor, a terminal, and a teletype printer. I got it because I wanted to learn more about computers. Then I got an Apple II, then an Apple III.'' And then he starts in, like a real computer nut, naming the machines that litter his house: a IIe, a Radio Shack Model 200, a C-64, two Macs, an Amiga, a IIGS. Portal was conceived on a Macintosh.

Rob became interested in taking the computer novel ''somewhere I'd never gone before. I was very interested in the graphic impact of the computer, and you can't get that with a book. Computers are very powerful tools. They change the way we see and live. The computer's a good tool for integrating and filtering all the various kinds of information and facets of our culture.

''Stories about the future or computers or the world seem most appropriate for telling on the computer. I know there'll be mystery novels, sci-fi novels, time travel, historical romances, even office E-mail romances, all happening on the computer. It's making the computer do what it naturally does well.''

Rob sees himself as a crossover writer, going from traditional print medium to computers in much the same way authors crossed over from print to Hollywood films in the past. ''Computers are more accessible to writers than the movies; you don't have the pressure of time, and it's easier than trying to boil down narrative into stage directions.''

What does the future hold? Swigart says he's intrigued by the promise of CD-ROM, with real interactive-video capabilities. ''I'm still writing books,'' he says, ''but it's fun to be at the beginning of a whole new explosion.'' And where is that explosion, called the electronic novel, going? ''In my mind it's going to be where I'm pointing,'' Rob says, a twinkle in his eyes and a wry smile crinkling his face. ''I'm like the traffic cop.'' Or maybe like Homer? ➡

Reading by Computer

Portal 1.0

Computer novel. **Pros:** *First-rate science fiction narrative.* **Cons:** *Would be faster in a RAM disk or on hard disk, but only works from floppy drive; reservations about reading novels on a CRT.* **List price:** *$49.95.* **Requires:** *512K.* **Copy protection:** *Key disk.*

Portal is the first interactive program to call itself a computer novel. Written by Rob Swigart and published by Activision, *Portal* is a compelling, complex, and often plausible science fiction story.

The story takes place in 2016, apparently a pretty bad year for humans on planet Earth. Returning from an outer space mission, you find no one. Not a soul. Not even the proverbial "last surviving man (woman)." In fact, you're him (her). You do find that Worldnet, the massive multidimensional computer system that spans the globe and reaches into the nearby space colonies, is functioning,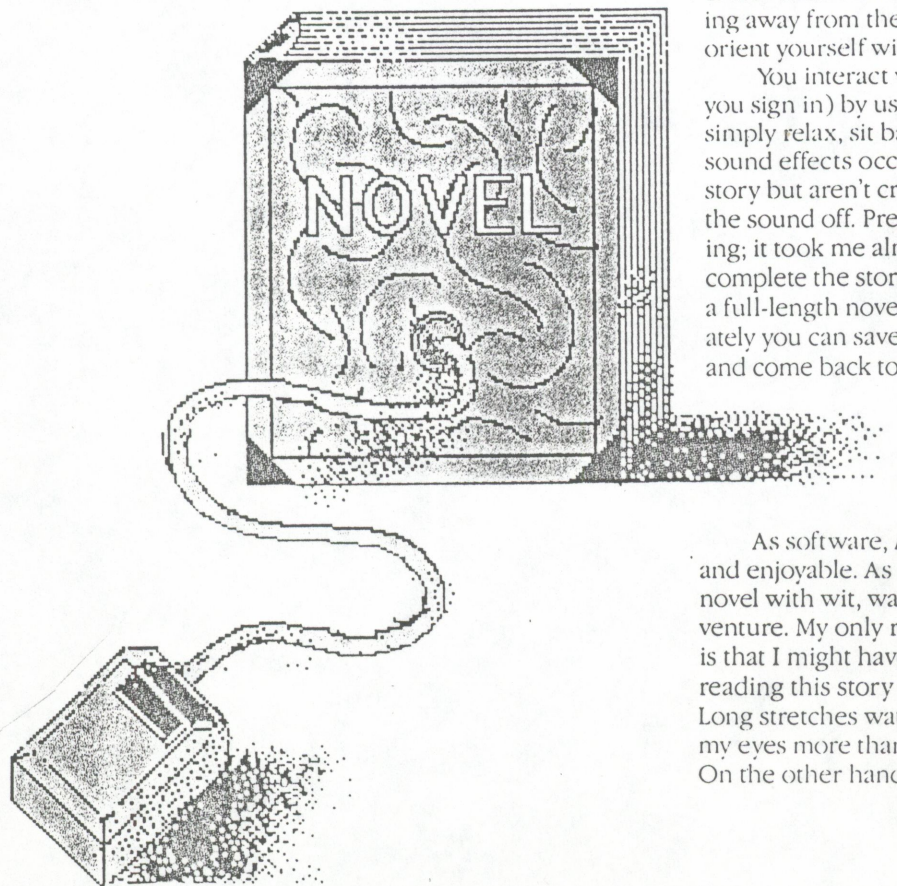 though not very well. Still, enough of the global network is operating for you to piece together the story of the disappearance of humanity. You pursue the truth by using the available nodes of the computer.

While you're scanning the few accessible bits of data left in History, Central Processing, and Med10 (3 of the 12 "data space" nodes in the Worldnet system; see "Story Fragments"), your research is interrupted by Homer, the raconteur node—a complex algorithmic crystalline AI computer that takes the massive input from Worldnet and turns it into cohesive narrative. Homer wakes up (so to speak) distraught that there is no one left to hear his tales; he's encouraged by your presence, though, and asks you to help him remember what has happened. Gradually, with Homer's help, you unravel the complex story of Peter Devore, Regent Sable, the Mentor, and others who played pivotal roles in the events preceding humankind's demise.

Homer delivers the story in short episodes with supporting information from History and the other nodes (SciTech, PsiLink, Military, Edmod, Life Support, Geography, Wasatch, and Psychological). You can read some parts of the novel out of sequence, either by accident or by intention, but most of the story is only presented after previous parts have been read, so your role is controlled. A flowchart of the entire novel is available from Activision. It takes nothing away from the story, and it helps you orient yourself within the narrative.

You interact with *Portal* (except when you sign in) by using the mouse, so you can simply relax, sit back, and read. Pleasant sound effects occasionally punctuate the story but aren't critical, and you can turn the sound off. Prepare to do a lot of reading; it took me almost three full days to complete the story. The program is, in fact, a full-length novel on three disks. Fortunately you can save your place at any time and come back to it later.
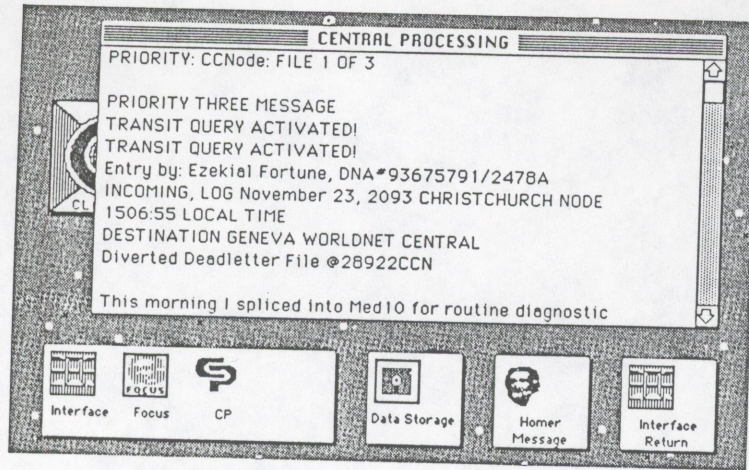
As software, *Portal* is well conceived and enjoyable. As literature, it is a first-rate novel with wit, warmth, mystery, and adventure. My only reservation about *Portal* is that I might have been more comfortable reading this story in a conventional book. Long stretches watching the screen tired my eyes more than reading a book does. On the other hand, I experienced a sense

Macworld

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┌──────────────────────── CENTRAL PROCESSING ────────────────────┐
│ PRIORITY: CCNode: FILE 1 OF 3                              ▲    │
│                                                                 │
│ PRIORITY THREE MESSAGE                                          │
│ TRANSIT QUERY ACTIVATED!                                        │
│ TRANSIT QUERY ACTIVATED!                                        │
│ Entry by: Ezekial Fortune, DNA#93675791/2478A                   │
│ INCOMING, LOG November 23, 2093 CHRISTCHURCH NODE               │
│ 1506:55 LOCAL TIME                                              │
│ DESTINATION GENEVA WORLDNET CENTRAL                             │
│ Diverted Deadletter File @28922CCN                              │
│                                                                 │
│ This morning I spliced into Med10 for routine diagnostic   ▼    │
└─────────────────────────────────────────────────────────────────┘
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| Interface | Focus | CP | | Data Storage | Homer Message | Interface Return |

of freedom and participation playing *Portal* on the computer that I would have missed with a novel. *Portal* may well be a first step toward a new genre of computer entertainment. As Swigart puts it, "*Portal* may be the 'Great Train Robbery' of computer novels."—*Rusel DeMaria*

See *Where to Buy* for product details.

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'Last Ship' docks at the end of the world

By Chuck Moss

Apocalyptic postnuclear war visions have had several incarnations. The first post-Bomb books included influential works like Nevil Shute's *On The Beach*, which explored the spiritual dimensions of horror. Later came tales that used The End as a device for adventure, and eventually Armageddon faded into cliche.

Now, with the resurgence of Ban the Bomb-ism, nuclear war books have returned to their original mission of philosophy.

A fine example is *The Last Ship* (Viking, $19.95), one of a number of intensely personal sci-fi works released recently. It was written by William Brinkley, author of naval novels like *The Ninety and the Nine*.

Brinkley's new book is a terse yet elegantly convoluted story concerning the USS Reuben James, an atomic-powered destroyer filled with nuclear cruise missiles. Narrated by the captain, the book follows the ship's lonely voyage as the only survivor of the final war.

Marked by a spare, introspective monologue and a minimum of showy devices, *Ship* achieves a gentle sort of horror climaxed in one of the most hair-raising scenes in any novel: a voyage up the Thames into the shrouded poison of bombed London.

Marked by ethical, sexual, nationalist and humanitarian concerns, *The Last Ship* is a stellar addition to an ambitious shelf, dealing with our by-now-familiar, but nonetheless perilous nuclear Sword of Damocles.

■ Who is killing the great artists of Earth? In *Narabedla Ltd.* (Del Rey Books, $16.95), singers, musicians and operatic divas all vanish soon after signing a contract with a mega-company. Mr. Nolly Stennis, once a Carnegie Hall-level tenor who lost his voice and other abilities because of mumps, begins to investigate. He finds the clue lies is spelling the firm backward: the name of a distant star. He finds out more than that.

Thus starts another fast, seamless, lighthearted but thought-provoking novel from consummate pro Frederik Pohl. The sci-fi institution and genre giant gets more technically proficient with every book he writes. With *Narabedla Ltd.*, you're in the hands of a master.

■ *The Lost Road* is an abandoned time-travel story that *Lord of the Rings* maestro J.R.R. Tolkien began, then dropped to write *The Hobbit*. It also seems to refer to the empty byways of Middle Earth now explored with an archeologist's eye by Tolkien's son Christopher, who edited this new offering, *The Lost Road and Other Writings* (Houghton Mifflin, $18.95).

SCIENCE FICTION

This is the fifth book of jottings, notes, ramblings and errata left behind by the professor, and the output grows increasingly obscure. An eye-glazingly scholarly work with little readable entertainment, this book is of interest only to die-hard Tolkien fanatics. All 50 million of them.

■ Does the future belong to Orange County? That's like telling a Detroiter that the action is in Oakland County or informing a San Franciscan that Star Trek's federation HQ is in Marin. Still, Kim Stanley Robinson's new book, *The Gold Coast* (Tor, $18.95) makes a disturbingly plausible case for suburbia *uber alles*.

Jim McPherson is the hero of *Coast*, an unemployed mall rat and drifter in the "autopia" of 21st-century L.A. Rather, not L.A., because no one lives in L.A. anymore. McPherson lives by the car, tearing aimlessly through a chillingly banal world while his breadwinner father designs weapons for the Pentagon. He yearns for some history but merely engages in pranks until his life peters out ... guess where. Driving some more.

The value of this alienated work is that, unlike some much less well-conceived science fiction, *Coast* is probably a bona fide look at the future. The problem is that A) it's terribly bleak, and B) it's virtually here already. Meet you at Taco Bell.

■ By contrast, Rob Swigart's *Portal* (St. Martin's, $18.95) is truly off the wall, with Armageddon, computers and enhanced consciousness all wrapped up in a stylistically inventive package. An astronaut named Peter Devore returns from a deep-space mission only to find himself alone on the planet. Where did everybody go? As well you might ask! Through the Portal. Should you follow? Well, Devore figures to check it all out before he leaps.

Thus the book becomes an intermittent series of flashbacks that alternate with his search. Eschewing conventional narration, author Swigart fashions a melange of computer readouts, reports, inquiries and data transmissions. It takes some getting used to, but this stylistic deviation grows on one and, unlike some other SF books, doesn't seem an affectation.

Does Devore leave through the Portal? Does the rest of humanity jump back to join him? Either way, *Portal* is first-rate post-cyber-punk SF.

Free-lancer Chuck Moss reviews new science fiction regularly for The News.

PORTAL

Portal is an original, richly imagined work of interactive fiction. But unlike the Infocom style of interactive fiction (see "They Take the High-Tech Road to Adventure" in this issue), it is not a game and contains no puzzles; the interaction consists solely of your tracking down the threads of the story as it slowly unfolds on the screen.

The method by which the story is told is itself part of the story. You are a space traveler who, in the year 2106, returns to Earth after a long absence and finds it devoid of human life. Locating a Worldnet computer terminal (represented by your home computer), you begin to gather bits and pieces of information from 12 "dataspaces" within the vast computer network.

These dataspaces contain genetic, medical, and other facts about the important characters in the story; general scientific, military, and geographical information; and summaries of historical events from 1990 up to the present. The most important dataspace, however, is occupied by Homer, a computer algorithm with human sensibilities—and emotions—who narrates the story as you discover it.

Homer, who begins knowing nothing, is as eager as you are to learn what happened. At first, information is sketchy. But gradually, the factors that led to the great migration become clear, as do the strange events that led to the discovery of the Portal.

It's a wonderful story, and ultimately a moving one. And in the manner of its telling it is nothing less than brilliant. —B. H.

GOOFY FANTASY GAMES

If all fire-breathing dragons are starting to look the same to you, take a break from your serious fantasy gaming to try something silly. After one of these games, you may never slay dragons with a straight face again.

Wabbit's Wevenge (Pacesetter, Ltd., $15) is a sequel to last year's Wabbit Wampage, which enacted a war between a tribe of rabbits and a crazed farmer. In Wevenge the stakes are raised as Mayor McGreedy (a man with a "cwaving for wabbits and a lust for big money") tries to turn the critters into fur coats. Enter Wambo Wabbit, grenades and M16 in hand, to free his floppy-eared kin.

Characters—like Wambo, McGreedy, and Bernie the Dog—get a movement allowance and an attack strength. Weaponry includes a banana peel or a curved pipe (you know, to aim a flying bullet or grenade back at the opponent). To win, Wambo must save more bunnies than McGreedy turns into coats.

Kings & Things (West End Games and Games Workshop, $20) calls itself "the fantasy board game with everything," and makes good on that promise: the "Things" run the gamut from cows and bears to dinosaurs and Big Foot.

The board is made up of large hexagonal tiles, which are placed face down at the start of the game. As your assorted Things enter a tile, you flip it over to reveal the terrain. A die roll determines whether the hex contains anything else. Sometimes you'll pick up treasure, or a magic item, or earn special income. Other times you'll have to fight creatures like the sleepy-looking bears or the fierce killer penguins.

Your object is to expand your territory and pick up recruits while building forts. You win by earning enough income to turn a fort into a citadel. The board is different every game, and there are plenty of special characters, treasures, and creatures to keep the game fresh. Kings & Things is not just goofy, it's challenging and tremendous fun as well.

Americans, though, have no monopoly on goofiness. The British have unleashed two bizarre items recently. **Blood Bowl** (Games Workshop, $25) carries American football to its illogical extreme. The playing field looks familiar, but players include zombies, orcs, elves, skeletons, and other nasties. These players can throw, or kick, or simply attack a nearby opponent. Hitting a player removes one of its "wound points" a player reduced to one wound point is, at best, stunned—or, at worst, dead. The object, of course is to score the most touchdowns, but the mayhem on the field is the real fun. And once you've read the tongue-in-cheek rulebook you'll look at the big game on Sunday in a whole new way.

Chainsaw Warrior (Games Workshop, $25) a solitaire game set in a lower Manhattan infested with strange creatures from another dimension. (We're talking zombies, not yuppies.) You try to remove controller of the forces of evil, known as "the Darkness."

You roll dice to create warrior, then choose weapons, clothes, and other items—ranging from lock picking sets to the reliable Westron MKX Pistol-Grip Chainsaw. Each turn you flip a card to see what you meet, engage in combat needed, and move the time 15 seconds ahead. Various counters keep track of your radiation level, endurance and marksmanship. If the Darkness hasn't been met and defeated in one hour you—and New York City lose.

Unfortunately, much of the game is mechanical: you get to choose your mode of combat, but that's it. Goofy fun, yes, but mostly a matter of luck. —M.
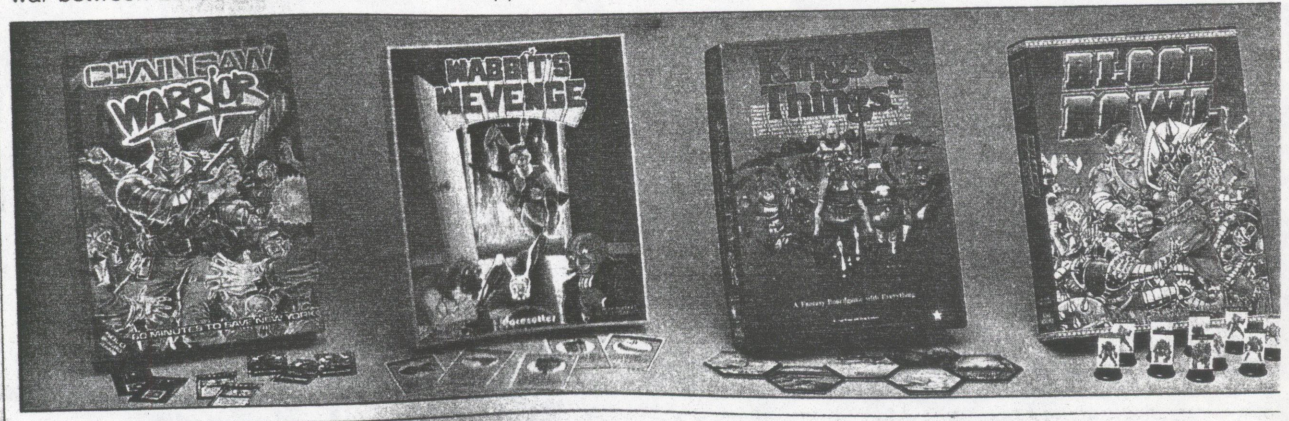
Computer games take a new direction

New software allows viewer to 'enter' action

By Sharon Bernstein
Herald staff writer

"I magine," breathed Bob Jacob, blue eyes aglow, "'Gone With the Wind.' And at the end Rhett has a choice:

"A. Frankly my dear, I don't give a damn.

"B. Let's go to Baltimore and start over."

Bob Jacob wants to make movies for your computer, movies you can control.

Jacob is not alone. Across the nation, in tiny offices and giant think tanks, designers and producers share the same obsession. They are convinced they can elevate the computer game from shoot 'em-up entertainment for kids and make it something approaching art.

Some of the new programs will use real videotaped images instead of computer-generated graphics. Others, built on compact laser disks like the ones now used for music, will allow the user to "enter" the videotaped scene on a computer screen and look around. One, for example, lets the user stroll through a South American jungle.

"I'll know we're getting good when we create a piece where the player has the same emotional response to one of our productions as they do when they see a movie," said David Riordan, a former pop singer and film producer who works with Jacob at Cinemaware Corp. in Westlake Village.

"Entertainment software is becoming more sophisticated and

more satisfying intellectually," said Celeste Dolan, who edits the Van Nuys-based newsletter, "Computer Entertainer."

Novelist Rob Swigart, for example, has written what he calls an electronic novel, a universe on a disk titled "Portal."

In "Portal" — published by Activision — you don't just read words as they go by or look at pictures. You actually play the role of the narrator of the novel,

Cinemaware President Bob Jacob, standing, and Vice President John Cutter base computer-games software on movies and film characters like "The Three Stooges."

Paul Chinn/Herald photographer

In a world of bang-bang, ritualized computer games, Activision was taking a risk when it decided to go with "Portal," said Melinda Mongelluzzo, spokeswoman for the Mountain View publisher. While not phenomenal, sales have been steady, and "Portal" has won a following among consumers who want more depth than they get in a standard game, she said.

"Some people reviewed it like a game, and they didn't like it,"

Mongelluzzo said. "They said it was boring. But I think more (software publishers) will be doing projects like this."

At Cinemaware, many of the software packages are based on actual motion pictures. They even come with posters and production credits. "They are games, we recognize they are games, but they're being marketed and distributed 'to-be movies,'" said Jacob, a former literary who

founded the Cinemaware two years ago with his wife, Phyllis. The success of companies like Cinemaware — the firm estimates $5 million in sales this year — stems partly from an unexpected resurgence in the computer game business, which had faded dramatically after their peak in the early 1980s, said newsletter editor Dolan.

Games

Part of the surge is due to the new, highly versatile computers that have come on the market recently, such as Commodore's Amiga system, Dolan said.

At the same time, computerized video games are making a comeback, thanks partly to the roaring popularity here and in Japan of the Nintendo company's game system. The giant toymaker now has 90 games that can be played on its small, inexpensive consoles.

The computer game business hit its zenith in 1984, with sales of $290 million, according to the research firm Dataquest. By 1986, sales of computer games had slipped to $218 million. But figures from the first part of 1987 seem to indicate that the downward spiral has ended, said Dataquest analyst Paul Cubbage. By 1990, game sales should once again top the $290 million mark, Cubbage said.

"The whole thing has kind of caught fire again," said Dolan. "They've caught a second wind."

Computers' improved graphics and stereo sound inspired game designers to improve their software, Dolan said. And as software went beyond crudely drawn war games aimed at teen-agers, consumers began to take a second look.

"Everybody thought the market was 12- to 17-year-olds, and mostly boys," said Dolan, herself an avid gamer. "More women are in it now. And as adults become more interested in programming, they demand more than a 12-year-old kid would."

All this has added up to big scores for the leading players in the business of games. Publishers of entertainment software — among them Activision, San Mateo's Electronic Arts, Broderbund of San Rafael, Mindscape of Northbrook, Ill., and Epyx of Redwood City — are vigorously marketing thousands of titles, said Dolan. And a host of smaller companies are hawking projects of their own, such as "L.A. on a Disk," a computerized romp through the Big Orange made by Klynas Engineering of Simi Valley.

On Cinemaware's drawing board for March release is a test game called Matchmaker. It's the company's first attempt at using real video pictures instead of animation or computer graphics. As the name implies, Matchmaker is a how-to-get-a-date program, set in a singles bar.

In Matchmaker, the computer monitor becomes a richly colored television screen. The camera serves as your eyes, swaying as you enter the bar. The scene changes as you press computer keys to indicate the person you'd like to speak to, where you'll walk, what you'll drink.

Matchmaker was difficult to make, Riordan said, because he had to shoot the video from every conceivable angle.

Still more complicated was the programming for Palenque, developed by New York producer Kathleen Stevens Wilson for General Electric's experimental compact disk system. Palenque uses videotape to simulate a trip through ancient Mayan ruins. The tape is shot to make it seem that you're standing in the middle of the jungle. You can look in all directions without a break in the photography because of the way the pictures were fed into the computer.

Because of the potential it holds for programs like Palenque, the compact disk — the same CD that has set the recording industry on its ear — is viewed by many in the computer entertainment industry as the wave of the future.

"People are betting that this is going to be the new buzzword of the 1990s," said Jacob. "And I believe them."

The disks would provide high-quality digital sound and video — and be completely interactive, allowing the player to choose the course of the story or game.

Already, toy companies Mattel Inc. and Hasbro Inc. are developing compact disk systems for the home and designing software for children.

General Electric, working with the David Sarnoff Research Center in Princeton, N.J., and the North American arm of the Dutch Philips Corp., are among the companies designing systems for adults.

Mattel and General Electric hope to bring out their CD systems during the first half of next year, representatives of both companies said.

With programs like Palenque and the electronic novel "Portal," entertainment software today is a far cry from what it was just a decade ago.

It's not just a game, it's an adventure

Somewhere in the abandoned city that was once Chicago I sat mesmerized.

I pecked and pecked at the computer, trying to figure out what had happened. I'd been gone on a space voyage and when I returned, Earth was empty. No one was anywhere — there weren't even any dead bodies.

All I found was this computer terminal, faintly gleaming in the twilight.

Slowly, through the computer, the story unfolded.

Forgetting completely that I was sitting in the middle of the Herald Examiner art department, glued to a beeping, whirring Macintosh computer, I was entwined in something that didn't seem like a computer game at all. This was "Portal," the first "electronic novel."

"I'd been thinking for a long time about using the computer as a medium for telling stories," said Rob Swigart, the Redwood City author who wrote "Portal." "I was secretly hoping that people who use computers at work would pick this up during their lunch hour the same way people would read a romance novel."

In "Portal," Swigart has re-created the feel of a good novel, yet the tale is not experienced simply by reading text. It's as if the reader becomes the narrator, slowly discovering what has happened to Earth by finding 'lost files" in the computer. It's a bit like a novel that's written as a series of letters or an interactive play like the long-running "Tamara."

The story in "Portal" takes hours to unfold — perhaps just as it would if the reader were sitting at an abandoned terminal talking with a sluggish computer intelligence and hacking through files. Piece by piece the story comes out. There was a boy named Peter Devore. He was somehow connected to the disappearance of everyone on Earth. He discovered something he wasn't supposed to discover.

"Portal" is different from a game because there's no winning. Readers don't decide the direction of the plot, they only influence the order in which some information comes up.

"Experiencing it is different from reading a novel," said Swigart. "The rhythm of it is very different. The machine imposes its own rhythms on it."

— Sharon Bernstein

REVIEWED BY JOHN JERMAINE

Portal

Computer: Commodore 64
Publisher: Activision
2350 Bayshore Parkway
Mountain View, CA 94043
Medum: Disk
Price: $39.95

Think of Portal as the pages of a book ripped and tossed into the air. Your task is to reconstruct the book page by page.
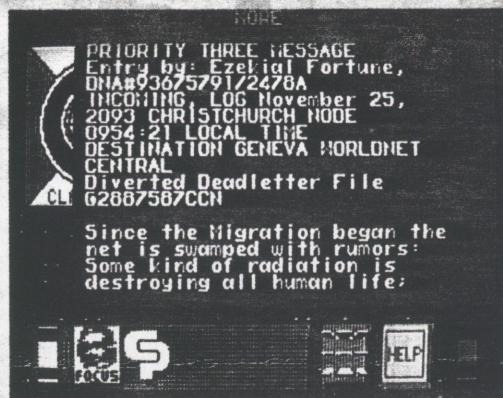
Early in 2004, you volunteered for a special mission that would take you to another solar system. But something went wrong. You were revived, expecting to begin a year of scientific tests and observations near the twin star system 61 Cygni. To your amazement, you discovered that your ship was bound toward earth.

In your absence, many new satellites had been added to the crowded sky above the planet, but these devices lacked their normal electronic chatter. A scan of the planet showed that not a single person remained. Several days ago, you landed your small craft south of the great metropolis of Chicago. Since your departure from the planet, the city had been preserved under an enormous transparent dome. As you approach the massive structure, you find the access lock of the dome open.

the building, you discover a chamber bathed in a mysterious glow. Upon closer inspection, the glow originates from the light of a computer terminal. Nearby you find a manual titled "WORLDNET Emergency Operating Instructions." It explains how to contact a special group of 12 data centers that have stored valuable information about the affairs of the world. Seated at the keyboard, you're ready to explore the years of the planet you never knew.

I spent 12 consecutive evenings studying *Portal*. After I finished evaluating the product, my curiosity led me to look at another reviewer's comments to see if we agreed on most of the major issues. Surprisingly, the reviewer thought *Portal* was a boring game.

First of all, the program isn't a game at all, and it doesn't resemble any game on the market. You don't take command of a great vessel loaded with weapons, for example, or assume the role of some colorful character setting off on a dangerous cosmic quest. No scoring mechanism is present, and you don't have to worry about penalties, timers, carrying the right objects around with you, or the threat of being blasted to atoms by a powerful foe that can appear at any moment. So what exactly is *Portal*? I believe it is a science fiction book merged with a classic mystery novel. You are the title character in a story where you forage for clues to solve a great mystery.

Two features are constantly displayed on the screen: a dataspace window that dominates 90% of the picture and a focus line at the bottom of the screen which contains four icons. The window has two functions. First, it displays a 12-symbol map of data bases you can explore just by manipulating a joystick. This window also acts as a monitor screen for the text files, diagrams and pictures you encounter along the way.

Once you've focused your attention on a single data space, like History for example, press the fire button and view the list of file titles it contains. Titles that have already been examined have a check mark beside them. After you have seen the list of titles, select a file to read, use the stick to maneuver that title into the data space window, and press the fire button one more time. The file is now open for inspection, and the window has transformed from a list of titles to pages of text. Pulling down on the joystick calls up the pages of the file in their proper order. Pushing the stick forward reviews the pages you have just read. The words "No more" appear at the top of the window whenever a file is finished.

Portal's focus line is a master control panel containing the four icons. Going from left to right on the strip, the long blue rectangle allows the user to exit a file at any time, while providing a visual report of how deep you have penetrated that particular data space. The white block is used to mark your place in the program when you wish to quit right now and return to that point at another time. A yellow square displaying a black drawing of a man's face is a direct line to Homer, your computer ally in this search for the truth. You use this symbol quite often because Homer wants to solve this mystery as much as you do. He tries to tell you where to go for your next file of information and sometimes he makes this square flash to tell you he has a very important message. But most of the time Homer provides some food for thought that helps you reason where you should be looking for unopened data files. Activating the final gray box returns you to the interface map of data space icons.

Homer has the ability to extract data from unknown sources and convert it into an interesting narrative story. Central Processing, located in Geneva, is an unusual data space because it seems to acquire a lot of information that doesn't quite fit into one specific category.

Some data centers contribute graphics to the program for the viewer to examine. Psychology, for example, offers graphic psychological profiles of many of the characters in *Portal*, while Edmod displays each individual's aptitude and learning skills profiles in the same manner. Life Support provides another collection of graphics which allow you to

PORTAL

study the health of each person in eight different ways.

Wasatch center also offers unique material. It specializes in presenting genealogical graphs and diagrams beginning around the year 2010. History and Geography supply information about these two topics, while Scitech delivers science and technology reports as they become available. Med10 offers files of general information about medicine and medical problems of the future.

The two final data spaces, Military and Psilink, contain important top secret documents that the public has little or no knowledge about. Military files usually consist of priviledged information about acts of war and weapons, while Psilink contains a series of forbidden files offering new data that helps to explain many of the complex situations which arise in the story.

The graphics of *Portal* are original and entertaining, but somewhat simple in nature. There are a few outstanding exceptions, however. I was very pleased with the opening sequence of the program because it gives you a quick look at a series of diagrams and drawings that become important as you progress into the scheme of the story. Bizarre sounds complete this unique presentation which resembles the opening sequence of a movie.

The graphic transition from displaying the icon interface to showing the inside of a data space uses an interesting transformation sequence. It is smooth, linear and a pleasure to watch. File pictures and diagrams are black and white with some details. These drawings support the story very well, but large numbers of them in the program limited the amount of detail the programmer could add to each picture.

Portal's sounds are also very original, but the catalog of noises is very small considering the fact that the program is five disk-sides long. Certain sounds tend to become monotonous after a while.

Portal doesn't resemble any existing computer game and it shouldn't be judged as one. The program is a novel in software form. Think of *Portal* as the pages of a book ripped from its binding. The user holds page one in his hand and throws the remaining pages high into the air. Your task is to reconstruct the book page by page.

Debbie de Peyster plays...

Portal, *Activision, 2350 Bayshore Parkway, Mountain View, CA 94043. $44.95.*

It's the year 2106. You've just returned to Earth after a 100-year journey into space. But there's no one here to greet you—the countries, the cities, the underground tunnels are deserted. Where is everyone?

That's all I needed to get hooked on Portal, a science-fiction novel in which your sole link to the past is an icon-driven computer terminal. Searching for clues in a network of databases, you slowly piece together the story of what happened to civilization and where the people went. Believe me, you have a long way to go before finding the answers—three double-sided disks, of which I'd used only one after ten hours. (Fortunately, you can save and restore a game in progress.)

Navigating through database levels takes a little getting used to, but it's easy once you get the hang of it. (The on-line help that appears early in the game lays it out for you. You don't have to study documentation, and I like that a lot.) Moving through the different databases, however, is a bit tricky—you can get clearance to certain information only if you proceed in the correct sequence. While each screen gives you a hint of where to go next, I found the *Guide to Portal* cheat sheet extremely helpful. (Get it from Activision for $3.)

I lose myself in the science-fiction world Portal creates, and it keeps me coming back to solve the riddles. If you're curious, and like a good mystery, you'll like Portal, too.

WHERE IN THE WORLD IS CARMEN SANDIEGO?

Broderbund
17 Paul Dr.
San Rafael CA 94903

INFO-rated
★★★★+

This is a really good educational game. You are a famous detective, and one of the villains of V.I.L.E. has stolen a famous treasure. With the help of the onscreen clues and your trusty World Almanac and Book Of Facts (included) you track the culprit around the world. Besides teaching you how to use reference books, WITWICS will lead you to all kinds of interesting information about the countries you visit, like currency, flags, and population, and you'll hardly be aware that you've been taught. The graphics and gameplay are nice, too.   -MB

ALTER EGO

Activision
2350 Bayshore Frontage Rd.
Mountain View, CA 94043

INFO-rated
★★★★★

I really like this unusual and innovative 'game' which, tho not billed as such, is some of the most broadly therapeutic and consciousness-raising software available. Alter Ego is also very entertaining. Describe yourself (male and female versions are available) to the computer, then dive into your hypothetical life at any age level from infant to codger and play out your fantasies, try on new personalities, find out what you'd do if... The box suggests parental discretion, but I would recommend this wholesome software to anyone old enough to read.-BD

Dr. Ruth's Game of Good Sex

Avalon Hill
4517 Harford Road
Baltimore, MD 21214

INFO-rated
★★★+

Now, Fresh from the Donahue show!... that dynamic little sex celebrity (who can't possibly have *time* for sex herself) has brought her one-person crusade for elevated sexual awareness to the computing community (the last frontier?). There are some very explicit multiple-choice questions in a fairly standard quiz format allowing up to four players to test their knowledge of sexual facts (you may be surprised at some of the things you didn't know!) Very educational, with lots of good information. Not for prudes or 6th grade boys!   -BD

LEATHER GODDESSES OF PHOBOS

Infocom
125 Cambridge Park Dr.
Cambridge MA 02140

INFO-rated
★★★★

This sexy spoof of 1930's science fiction pulp novels is fun to play, though Infocom has produced more challenging standard-level text adventures. In this one you must defeat the evil Leather Goddesses, who are bent on sexually enslaving the citizens of Earth. There are a lot of giggles in this one, and you'll run into some real pulp-novel characters and cliffhanger situations along the way. You won't be offended by Leather Goddesses: it has 3 naughtiness levels, and even LEWD is pretty tame. (But watch the scratch'n'sniff smells!)   -MB

PORTAL

Activision
PO Box 7287
Mountain View CA 94043

INFO-rated
★★★★★

You've gone on a space mission and return to a deserted Earth! You discover a computer terminal linked into the barely-functioning worldwide database. With the help of an artificial intelligence, you try to piece together what happened to the people of Earth. This is an engrossing, fascinating, and somewhat disturbing program. It's like a murder mystery, an expedition, and having amnesia all rolled into one. The graphics are minimal but good, the text is excellent, and the icon-and-joystick interface is well done. Portal takes up 5 sides of 3 disks.   -MB

ROBOT RASCALS

Electronic Arts/Ozark Softscape
1820 Gateway Dr.
San Mateo CA 94404

INFO-rated
★★★★

This is a cute gam[...] to four players that combi[...] a computer game, [...] our knowledge [...] computer game (i[...] family board gam[...] of Rascals is a [...] robot scavenger h[...] effects, and gra[...] and the robots [...] endearing. The [...] feel as UNO [...] swapping. If yo[...] computer game[...] play, this one [...]

PORTAL REVIEW

By John Jermaine

Ladies and gentlemen of the jury, I am here to testify in the behalf of Activision's Portal program. Early this year I spent twelve consecutive evenings studying this interesting new form of software. After I had finished evaluating the product, my curiosity led me to look over another reviewer's comments on the subject, to see if we agreed on most of the major issues. Surprisingly, that individual thought Portal was merely a boring game. First of all, the program isn't a game at all, and it doesn't resemble any micro-computer game on the market. You don't take command of a great vessel loaded with weapons, for example, or assume the role of some colorful character setting off on a dangerous cosmic quest. No scoring mechanism is present in the software, and you don't have to worry about penalties, timers, carrying the right objects around with you, or the threat of being blasted to atoms by a powerful foe that can appear at any moment. It would also be hard to compare Portal to existing software because I can't think of anything it resembles. What exactly is Portal? I believe it is a special software blend of a science fiction book merged with the elements of a classic mystery novel. The user is the title character in a story where he forages for clues that might help him solve a great mystery. Ladies and gentlemen of the jury, please listen to the following testimony, consider the facts, and decide for yourself if Portal is innocent or guilty of being one of the most original software concepts of the year.

Before I discuss the components of Portal, I would like to give you the sequence of events which actually take place before you load in

the program. I have always been somewhat of a loner, but I never imagined that I was destined to become the last surviving human being in the Solar System. My name is not important because no one will probably ever read this report. Early in 2004, I volunteered for a special mission that would take a qualified individual to another solar system for a relatively short period of time. On May 24 of the same year, I reached for the stars. While I slept away the long months in a cryofield, the ship performed flawlessly. During the first five years of the mission alone, my vessel reached a fantastic velocity approaching the speed of light. Then something went wrong. I was revived, expecting to begin a year of scientific tests and observations near the twin star system 61 Cygni. To my amazement, I discovered that the ship was inward bound towards Earth. How could this have happened? I really don't know. Something apparently disrupted and destroyed a large portion of the programming that was guiding my vessel to its pre-determined destination. Luckily, the ship itself had not been damaged. While examining the mission data, I also uncovered the fact that the flow of time had been altered within the crew cabin as the vehicle accelerated. I can't explain this phenomenon either. None of my mission briefings brought up this possibility, and there was no way I could predict the present date on Earth. It really didn't matter though. My craft was bringing me home to a heroes welcome where I could pick the minds of the experts to obtain the answers I sought. As I approached the world of my birth, I sent out transmissions to the lunar outposts and the colonies positioned in the vicinity of Earth. The face of the Moon was strangely silent, as were the floating islands in space. In my absense many new satellites had been added to the crowded

sky above the planet, but even these devices lacked their normal elctronic chatter. I decided to park the mother ship in orbit, and decend to the world beneath me to investigate this great mystery first hand. My first stop was Cape Canaveral. It had de-generated into an over grown pasture of decaying buildings. The gulls flew over head and small animals scampered about, but any signs of recent human activity in the region simply didn't exist. Moving up the coast, I found Washington D.C. to be nothing more than a huge park of ancient memorials. Even the underground portion of the city was as quiet as a tomb. New York City had become a vast concrete canyon where strange vehicles were positioned on the streets as if they had been stopped during rush hour and their drivers removed. These discoveries were startling indeed, but now I had to face some cold realities. First of all there were no signs of massive radiation anywhere on the planet, so I could rule out war as being the cause of this great calamity. It was also bothering me that I wasn't finding any bodies in the sites I had explored. If the world had been plagued with sickness, natural catastrophes, meteors, etc., there would have been heaps of human remains. Lastly, whatever purged the existance of man had apparently taken place simultaneously on every human outpost in the Solar System. Why was I the exception to the rule? After many months of searching, I recently discovered the means of getting my answers. Several days ago, I landed my small craft south of the great metropolis Chicago. Since my departure from the planet, the loop and it's precious 20th-century architecture had been preserved under an enormous transparent dome. As I approached the massive structure, I found the access lock of the dome open to the weather. This was more evidence supporting the theory that

whatever had swept the human race from this plane of existence had struck very swiftly. Entering the enclosure, I began a routine systematic search of another well known population center. This time I was rewarded for my effort. On the second level of a building, I discovered a chamber bathed in a mysterious glow. Upon closer inspection, that glow originated from the "Ready" light of a computer terminal. A terminal ready for use. Nearby I found a manual titled " WORLDNET Emergency Operating Instructions". It explained how to contact a special group of 12 data centers that have stored valuable information about the affairs of the world for many years. Seated at the keyboard, I'm ready to explore the years of the planet I never knew, and solve the great mysteries surrounding the disappearance of the human race.

Now that you know what you're up against in Portal, let's discuss the prime elements of the program. Two features are constantly displayed on the screen: (1) a dataspace window that dominates 90% of the picture, and (2) A focus line, at the bottom of the screen, which contains four useful icons. The window I mentioned has two functions. First of all, it can display a twelve symbol interface map of data bases, that the user can explore just by manipulating a joystick. This window also acts as a monitor screen for the text files, diagrams, and pictures you encounter along the way. Once you focused your attention on a single data space, like History for example, press the fire button, and view the list of file titles it contains at that given moment. Titles that have already been examined have a check mark beside them. After you have seen the list of titles, select a file to read, use the stick to maneuver that title into the data space window, and

press the fire button one more time. The file is now open for inspection, and the window has transformed from a list of titles to pages of text. Pulling down on the joystick calls up the pages of the file in their proper order. Pushing the stick forward reviews the pages you have just read. The words "No more" appear at the top of the window whenever a file has been totally digested. Portal's focus line is a master control panel containing four useful icons. Going from left to right on the strip, the long blue rectangle allows the user to exit a file at any time, while providing a visual report of how deep you have penetrated that particular data space. The white block is used to mark your place in the program when you wish to quit right now and return to that point at another time. A yellow square, displaying a black drawing of a man's face, is a direct line to Homer, your computer ally in this search for the truth. I use this symbol quite often because Homer wants to solve this mystery as much as I do. "He" tries to tell me where to go for my next file of information and sometimes "He" makes this square flash to tell me he has a very important message, but most of the time Homer provides some food for thought that helps me reason where I should be looking for unopened data files. Activating the final grey box returns you directly to the interface map of data space icons.

Getting back to the icons of the interface, I was impressed with their sophisticated appearance, and I want to tell you something about each of them. Homer is the most important data center you encounter, but don't think of it as cold mechanical source of information. "He" is your artificially intelligent computer companion during this quest for knowledge. I use the term "He" because Homer displays many human qualities including curiosity, admiration, fear, he tries to create a

pun, and you can almost sense his need for contact with human beings. Homer also has the ability to extract data from unknown sources, and convert that material into an interesting narrative story. Central Processing, located in Geneva, is an unusual data space because it seems to aquire a lot of information that doesn't quite fit into one specific category. Some data centers contribute graphs to the program for the viewer to examine. Psychology, for example, offers graphic psychological profiles of many of the characters in Portal, while Edmod displays each individual's aptitude and learning skills profiles in the same manner. Life Support provides another collection of graphs which allow you to study the health of each person in 8 different ways. Wasatch center also offers unique material. It specializes in presenting genealogical graphs and diagrams beginning around the year 2010. History and Geography supply info about these two topics, while Scitech delivers science and technology reports as they become available. Med10 offers files of general information about medicine and medical problems of the future. The two final data spaces, Military and Psilink, contain important top secret documents that the public has little or no knowledge about. Military files usually consist of privileged information about acts of war and weapons, while Psilink contains a series of forbidden files offering new data that helps to explain many of the complex situations which arise in the story.

The graphics of Portal are original and entertaining, but somewhat simple in nature. There are two outstanding exceptions, however, to this rule. I was very please with the opening sequence of the program because it gives you a quick look at a series of diagrams and drawings that become important as you progress into the scheme of the story.

Bizarre sounds complete this unique presentation which resembles the opening sequence of a movie. I might also add that the graphic transition from displaying the icon interface to showing the inside of a data space uses an interesting transformation sequence. It is smooth, linear, and a pleasure to watch. File pictures and diagrams are black and white with some details. These drawings support the story very well, but large numbers of them in the program surely limited the amount of detail the programmer could add to each individual picture. Portal's sounds are also very original, but the catalog of noises is very small considering the fact that the program is five disk sides long. Certain sounds tend to become monotonous after a while. I believe there are seven different sounds used throughout the program.

In conclusion, I wish to present my closing statements to the jury. First of all, Portal is not a game, it doesn't resemble any existing computer game, and it shouldn't be judged as such. The program is a sophisticated novel in software form. I personally think of Portal as the pages of a book ripped from its binding, the user holds page one in his hand, and throws the remaining pages high into the air. Your task is to re-construct the book page by page. Homer is like the kid next door who says I think I saw page two float over there, or was it over in that direction? Even though "He" is a component of the system you are working with, Homer exhibits a genuine thurst for the truth, and you can trust him when he gives you a clue. The data files themselves were interesting, logical, and presented in a manner you would expect to find in a library or government data base. In some instances, I believe the inspiration for Portal's futuristic technology actually came from present day scientific research papers and magazine

articles. Portal talks about vehicles using liquid nitrogen for fuel. I'm sure I read something about the use of super cold gases as a possible fuel source several years ago in a magazine article. Another portion of the tale gives an account of two ancient particle beam generators destroying the sites of McMardo and Erebus soundlessly and with great ferocity. One of the weapons currently being developed for our national defense is a particle beam generator. I take my hat off to the person who researched the technology that supports the events of the story. The main display screen of the program looks sharp, and contains several powerful icons that are very user friendly. Even through the picture and diagram graphics might have been a little better, they support the story very well. Portal's sounds are also excellent, but there could have been a larger variety of them to support such a huge project. In all fairness to the people who programmed Portal, I think they simply ran out of memory. Before I conclude this review, I would like to tempt you with some bits of information about the Portal story. It is a tale of Peter Devore, a young man with a destiny. He discovered the portal, and has a part in the chain of events that led to the disappearance of the human race. Regent Sable, a man of authority, searches desperately for Peter because he fears the young man has the ability to change the world with his mind. Wanda Sixlove, a 26 year old woman with long dark hair, is one of the many sleeping occupants of a huge space craft 19 years out from Earth. What do all of these people have in common? Why does this tale begin in Illinois and end in Antarctica? Will a 2000 man assault on Mt. Erebus be successful? What is the secret of Terminus? Finally, can the human race be restored throughout the Solar System? All of

these questions and many more are answered within the data spaces of
Portal. I enjoy a good book, so I was facinated with the Portal project
from the very beginning. If you have similar interests, you won't be
disappointed either.

A PORTAL TO INNOVATION

By Arnie Katz

This month, Arnie gives us a recent history lesson and then reviews a history of the future

Software publishing is a risky business. In recent years, many producers of entertainment programs for home computers have acted like staunch members of Gamblers Anonymous. Publishers seem afraid to affix their company's precious brand name to anything less than a sure thing.

Of course, there are reasons for such exaggerated caution. Entertainment software is a fashion-oriented business and highly sensitive to any shifts in consumer preferences. The 1984 computer recession shook the confidence of software publishing executives as sales plummeted from the penthouse to the basement in six hectic months.

In that brief half-year, the shape of the home computer industry changed completely. Before the bottom dropped out of the market in 1984, companies luxuriated in an environment in which practically everything they tried succeeded handsomely. After the slump, it seemed as if nothing could succeed.

There's nothing like a string of flops to dissuade a company from committing itself to a program that's a little out of the ordinary, a little esoteric. When even the tried-and-true proves undependable, it's easy to view the unusual as simply beyond the pale.

That's why, for two long years, humdrum British imports and rehashed proven hits dominated new releases.

Companies mistrusted their own judgment about their programs' contents, so making them look inviting on the shelf took precedence over content. The power at software companies shifted from the product development department to the marketing department.

The rebound of hardware and software sales that started in early 1986 improved the climate for experimentation and innovation. The marketing mavens aren't abdicating, but now there's a feeling that content is salable once again.

One of the products of this 'new freedom' is *Portal* from Activision.

Portal may not be best entertainment program of 1987, but it is arguably the most significant. No other title has done as much to enlarge the computer entertainment universe. It represents a new category of entertainment software.

Portal is the first home computer program that can accurately be called a computer novel. It presents a detailed story as only a computer could tell it.

Other publishers had labeled various titles as 'computer novels' or 'electronic novels'. They weren't. They were adventures, usually all text, with overly linear plots and little meaningful opportunity for player action. Unable to write a multipathed interactive adventure, the designers based their games on a straightjacketed story-line that the player had to follow from start to finish without deviation.

The worst 'computer novels' amount to nothing more than a series of forced moves. Each command triggers a couple of screens of text that propel events to the next forced move. In effect, the player reads a story on the monitor and turns the 'pages' by hitting return or entering some perfunctory phrase. (These computer novels frequently cause a great deal of frustration when the player has to keep trying words until he or she stumbles on the one that pushes the plot to the next stage.) By calling such works 'computer novels', their publishers hope to avoid criticism from sophisticated consumers who want more scope in an adventure.

Portal, Rob Swigart's tale of a future society in which the entire population suddenly disappears, is the first true electronic novel.

Portal is structured as a set of interlocking databases. The player reads text files as the program adds them, one by one, to the menus of 12 data spaces. Each new file embellishes the plot, fleshes out characters, or provides background for this tautly strung science fiction story.

Portal is a novel, as opposed to an adventure, because the user does not interact with the plot or characters. The user-interface is not designed to facilitate order entry, but rather to make it easy to call up text files. The player finds files, studies their contents (text, maps, charts, and graphs), and pieces together the entire novel as it unfolds on the screen.

Portal casts the user as a space explorer, assumed lost, who returns to an abandoned planet Earth. All the vanished populace has left behind is the slowly 'dying' world computer network. Finding out where everyone went and why is the main objective of the game.

Portal is steeped in the wild invention that makes science fiction such fascinating, mind-stretching literature. Psionics, a super civilization in Antarctica, and spaceflight to distant stars all play major roles in this adult, absorbing story. *Portal* is a long way from bug-eyed monsters and laser battles in space. As a story, it stands up well against non-electronic science fiction.

The main display is a diagram of the network's 12 data spaces. Each database contains a specialized class of knowledge. Waswatch, for instance, is a computerized genealogy. A file found within this data space provides three graphs for every character in the story: Core intelligence, Physiology and ESP, and Family Tree.

The player moves among the data spaces. Pressing the action button allows the user to splice into the data space currently shown on the screen. Once inside, an icon-based menu makes it simple to study the active files.

Homer, the storytelling artificial intelligence, is the cornerstone of the storytelling process. It is an artificial intelligence that organizes data presented in the files into a coherent narrative. While Homer is occasionally long-winded, its periodic extensions of the story are the focus of reader interest.

The graphics are mostly simple geometric shapes, but there's just enough happening on the screen to keep the player riveted to his or her seat, madly turning up new files as fast as possible.

Portal is more than just a historically important computer program: It is an enjoyable computer experience. I hope it is the first of many such computer novels.
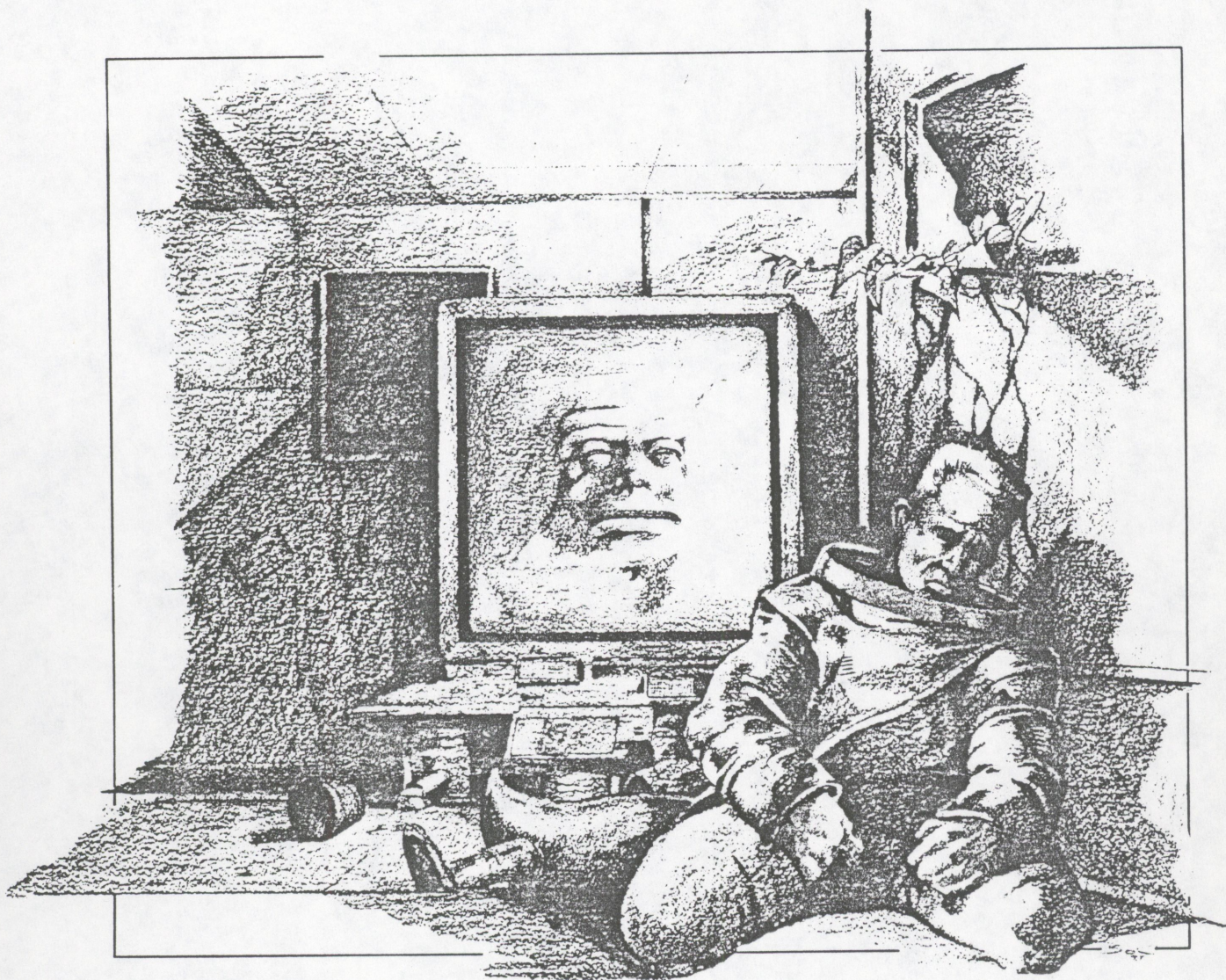
Portal
$49.95
Activision
Drawer 7285
Mountain View, Calif. 94042

PORTAL: DEPORTED TO THE MAC

By Linda Kaplan

Just because it runs on the Mac doesn't mean it's really a Mac program.
And in the case of a fine product like Portal, more's the shame.

Companies that port their products to the Mac often don't finish them. Activision isn't alone in this: Infocom even retains their original packaging, illustrated with an IBM disk. (Why don't they even paste a photo of a Mac disk over it when they plunk the Macintosh label on the box?)

More distressing, some products operate in ways antithetical to Macintosh standards.

For example, *Portal* consists of three 400K disks. You are advised, in the single Macintosh instruction, to insert disk one. As a Macintosh owner, you're used to acting intuitively, and may automatically

introduce disk two in the external drive. If you follow your instincts in this case, you will come to regret it. Well into the game, disk one is ejected from your internal drive and disk two requested. Sure, it's already in drive two. But *Portal* will not look at drive two! Worse yet, it disables the usual ways of ejecting disks — I used

a paper clip, which always makes me worry about breaking something.

At the start, you must enter your name. You'll instinctively grab for your mouse when you begin to type. Don't bother. There is no cursor visible for correcting errors. This will invoke a flash of helplessness in those of you born to computers with a mouse in your hand. Fortunately, your cursor reappears and is put to good use after the introductory screens. But there are other frustrating moments.

Portal is a convincing facsimile of an interactive program, but it is not genuinely so. You must read an entire file to trigger the next event and nothing you do will affect the story. That's not so bad. But you must drag the scroll-bar box to the very bottom of the file even though the ends of most of the hundreds of files are blank. This delay becomes irritating in proportion to your involvement with the story.

Portal's story is indeed compelling, more so after you realize that four of the databases are providing reams of incomprehensible and irrelevant information. A glance or two at Wasatch, Life Support, Psych and Edmond is more than enough.

You come to rely most upon Homer but will disagree with him sometimes about what is important. He's supposed to flash insistently when he's got something significant to say, but in fact, he rudely interrupts when you've begun something utterly fascinating, only to disappoint you with trivial information. And there are other difficulties with Homer.

When you are elsewhere, you can click on Homer's icon to obtain his advice. These messages hang. You'll learn to click on Focus to release them, but that returns you to Interface before you like.

Naturally, the *Portal* documentation was not amended for the Mac. Referring to the consequences of moving the stick or punching the yellow help button when there is neither is irrelevant or misleading.

Is *Portal* an innovative and exciting presentation? Yes! Are aspects of the interface splendid? Yes! Will it teach you to read again? Yes!

"So what does she want?" you ask. Well, I'd just like to see the quality of *Portal*'s porting to the Mac match the quality of the rest of the program. [*And we wouldn't mind if* Portal *would run on our 2 Mb Macs and on our Mac II — Ed.*]

SCOTT A. MAY

This was a banner year for personal computer owners. Whether the computers were used as a productive tool or a source of entertainment, software designers continued to amaze and delight us with fresh ideas and new approaches. It was a year of bold exploration, as software companies struggled to fulfill the needs of a diverse consumer market.

In the spirit of the holiday season, and as a special gift-giving guide, Tribune Extra proudly presents the second annual ON-LINE Software Awards — The Best Games of 1986. Winners and runners-up were chosen in 10 of the most popular computer game catagories. Alas, the awards carry no bells or whistles, just a round of applause and a hearty thumbs-up.

Programs were judged on the basis of overall quality, including points for sound, graphics, creativity of design and long-term interest. Although some programs were officially released in 1985, they did not receive wide distribution until this year. Finally, all programs are available for one or more of the following computers: Commodore, Amiga, Atari, Apple, IBM and Tandy systems. Consult your favorite outlet for specific details on price and availability.

GAME OF THE YEAR

"Elite"
Firebird Licensees, Inc.

To live and die in deep space. The intellectual's shoot-'em-up, this sprawling space-age adventure features all the right stuff: marvelous 3-D graphics, edge-of-your-seat action, long-term player involvement and strategic diplomacy. A must for all serious gamers.

RUNNERS-UP

"The Bard's Tale" (Electronic Arts, "Portal" (Activision), "Lords of Conquest" (Electronic Arts) and "Ultima IV" (Origin Systems).

DESIGN

Interplay Productions
(Includes Brian Fargo, Michael Cranford and David Lowery)

Interplay is the designer of several new-age classics, such as "The Bard's Tale," "Borrowed Time" and "Tass Times in Tonetown." They are true pioneers, breaking the barriers of a limited technology with innovative designs. This talented group has helped change the face of computer graphics, sound and player interaction.

RUNNERS-UP

Meier and Andy Hollis ("Silent Service," "Gunship"), Troy Lyndon ("Star Rank Boxing," "GBA Basketball"), Michael Bate and Rick Banks ("Aces of Aces," "Dam Busters").

SPORTS GAME

"GBA Basketball: Two-On-Two"
Gamestar/Activision

Even non-basketball fans will fall in love with this game's ingenius two-player options and computer interaction. Practice with a friendly game of "Horse" or play a full season of tough teams on your way to the championship game. A masterpiece.

RUNNERS-UP

"Leader Board Golf" (Access Software), "Hardball" (Accolade Software), "10th Frame" (Access Software), "Star Rank Boxing" (Gamestar/Activision).

WAR GAME

"Gunship"
MicroProse Simulation Software

Absolutely the state-of-the-art in combat flight simulations, "Gunship" blows all other helicopter simulators out of the sky. Complex, yet easily addicting, this is one you must see to believe. The best combination of action and strategy ever produced in a combat scenario.

RUNNERS-UP

"U.S.A.A.F." (Strategic Simulations, Inc.), "Destroyer" (Epyx Inc.), "Battlefront" (Strategic Studies Group), "Balance of Power" (Mindscape, Inc.).

ACTION GAME

"Ultimate Wizard"
Electronic Arts

A newly revised version of a cult favorite, "Wizard" is complete with 100 game levels and a user-friendly construction set for building your own devious screens. Fast, funny and highly addicting, "Ultimate Wizard" will push even the most jaded joystick jockey to the limit.

RUNNERS-UP

"Super Cycle" (Epyx Inc.), "Infiltrator" (Mindscape, Inc.), "Arctic Fox" (Electronic Arts), "AcroJet" (MicroProse Simulation Software).

TEXT ADVENTURE

"Spellbreaker"
Infocom/Activision

The final chapter in Infocom's infamous "Enchanter" fantasy series, "Spellbreaker" could be that company's best work to date. Undoubtedly one of the hardest text adven-

rewarding for those willing to see it through. For experts only. This is a tough one.

RUNNERS-UP

"Breakers" (Synapse/Broderbund), "A Mind Forever Voyaging" (Infocom/Activision), "Essex" (Synapse/Broderbund), "Amnesia" (Electronic Arts).

GRAPHIC ADVENTURE

"Portal"
Activision

Set in the distant future, you return to Earth from a 100-year space mission only to find no trace of the human race. Where have all the people gone? With only the help of a dying computer system, you must act quickly to uncover the truth before it is too late. "Portal" is one of the strangest and truly innovative games on the market. "Incredible" is the only word to describe this three-disk epic.

RUNNERS-UP

"Oo-Topos" (Polarware/Penguin), "Tass Times in Tonetown" (Activision), "Labyrinth" (Activision), "The Pawn" (Firebird Licensees, Inc.)

ROLE-PLAYING GAME

"The Bard's Tale"
Electronic Arts

The game which broke all the rules and wrote a few new ones in the field of fantasy games. Multilevel 3-D scrolling mazes, animated graphics, 85 magic spells, multiple character development — this game has it all. A very classy game that also happens to be one of the hardest in its genre.

RUNNERS-UP

"Ultima IV" (Origin Syst "Wizard's Crown" (Strategic lations, Inc.), "Moebius" (Systems), "Phantasie II" (St Simulations, Inc.).

BOARD GAME

"Lords of Conquest"
Electronic Arts

If you liked the board "RISK," you will fall in love "Lords of Conquest." Easy to and almost impossible to qui game of power and territorial gles is a bona fide classic .

RUNNERS-UP

"Shanghai" (Activision), " Rascals" (Electronic Arts), " sus Chess IV" (Firebird Lice Inc.), "Star Fleet 1" (In Corp.).

EDUCATIONAL

"Alter Ego"
Activision

Experience a complete life your microcomputer. From death and everything in b "Alter Ego" is an inc achievement in interactiv ware. Highly entertaining a thought provoking. Both m female versions available.

RUNNERS-UP

"Mind Mirror" (Electronic "WizType" (Sierra On-Line mework Helper Series" (Sp Software), "MasterType's (Scarborough Systems/Min Inc.).

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Microcosm

Computer Game Newsletter

December 1, 1986

Atari ST/Amiga-based Flight Simulator continues the two-player trend

Just got Sublogic's Flight Simulator for both the Amiga and the Atari ST. The inclusion of a two-player mode, via serial cable or modem link caps off 1986 as The Year of Gaming Connectivity. What began as the simple phenomenon of Maze Wars--the first working piece of applications software on Appletalk, one of today's fastest-growing LANs--has now mushroomed into a garden of computer-to-computer entertainment that arguably could spawn its own newsletter.

For now, Microcosm will evaluate all such games that come its way, but perhaps with a less reverential aura about such games. The new Flight Simulators will probably legitimize two-player modem gaming the way IBM legitimized personal computing. The question may soon be--why doesn't your favorite game have such an option?

Turning back to the software at hand, I am struck by the similarity of the Atari ST and Amiga versions of Flight Simulator. One would think the Amiga's superior graphics-processing power would yield some benefit over the ST--superior frame rate, perhaps more colors on

screen at any one time--but the two versions are virtually alike, except for the expected differences due to GEM vs. the Intuition user interface, and the more realistic engine sound on the Amiga; since sound plays no role in any version of Flight Simulator yet released, other than to enhance the simulation in a passive way, this difference is hardly worth going out and buying an Amiga for.

Running both versions in autodemo mode, they keep pace in virtual lockstep, with perhaps a slight edge by the Atari ST due to a higher CPU speed (8 MHz vs. 7.13 MHz on the Amiga, if memory recalls). Same colors, same resolution. What a letdown.

Still, it is evident from recent reports that the Atari ST is outselling the Amiga, at least worldwide, so us Amigaphiles must be happy with the fact that Sublogic went ahead and finished its Amiga version (this after the scary cancellation of an Amiga-only product called Radar Raiders) and look ahead with trepidation to wonder if Sublogic development on the ST (Jet, scenery disks, new programs, perhaps a revived Raiders) will

pull ahead of the Amiga. Maybe only Commodore, with a rumored mass-market version of the Amiga in 1987, can put the skeptics to rest.

Curiously, store owners will have to decide whether to carry two ST versions of Flight Simulator, one for color monitors and one for monochrome. It's hard to remember another game that required separate software for color vs. black and white. This means we may see more of this in months ahead for the ST, and I suspect likewise when the color Macintosh makes its debut in about a year. Since Apple is now selling more than 300,000 monochrome computers a year, who can say that color is king?

For now, we can enjoy what is otherwise a welcome addition to the 16-bit simulation world. With the release of Flight Simulator for the Amiga and ST, Sublogic regains the top spot in software aviation. Flight Simulator remains the grand act of its class, with a hint of just how far simulation at home can take you. Other companies' cockpit displays often look so like imitations of FS's, and the Atari/Amiga instruments look as sharp as ever. Elaborate windowing environments on both machines give users such control over where and how much of the cockpit or map displays to exhibit that maybe we need a new term here: desktop flight? Solid shading of objects and views of the airplane as if from a chase plane 50 feet to the side of either wing are very impressive, even if they tax the resolution of these machines and sometimes make the airplane look jaggedy. Equally impressive are views from the ground-based control tower.

As for the view out the window, it's as good as Flight Simulator has ever been. Sixteen-bit color

graphics are clearly superior to 8-bit color and 16-bit monochrome; I only regret I cannot compare the high-resolution Atari work to the Macintosh product published by Microsoft. Perhaps someone out there can tell us how they stack up? It may be too bad high-resolution monochrome isn't being considered in the Amiga world at this time.

SDI & King of Chicago (Mindscape)

How do you define interactive movies? Master Designer Software, through a series of new games that are never dull, is attempting to do so. It's virgin territory and there may be no easy answers, unlike interactive fiction, which relies so completely on standard text narration for its structure, despite the efforts of some publishers to inject graphics.

For me, the second of the CinemaWare programs to be released, King of Chicago, is the best of the first three attempts. Allow me to explain. The first program out was Defender of the Crown, was reviewed here last month. It was impressive largely because the publishers were willing to take a gamble on the most powerful graphics available in the PC world (the Amiga) and not worry, for the moment, about how to recreate such graphics on other hardware. Thus, you ended up with amazing software movies with up to 100K worth of graphics in one scene. The problem was that this approach left little room for the character development, shading, and play value which would make DOC an enduring simulation. Thus, its appeal is based primarily on the experience, not on interactivity. The third CinemaWare production, SDI, is out this month on the Atari 520 ST, with improved

RAMdisk-based performance with loaded into a one-megabyte Atari 1040ST. SDI, set to begin on October 25, 2017, supposes that a Soviet military revolt has taken place, with the Red Army and the KGB seizing various installations including spaceports around the U.S.S.R. Never mind that some scholars think that there really is no "civilian" control, as such, of the government in the Soviet Union today.

But in this setup civil war looms, with the "communist government" still in control at the Kremlin. The U.S. SDI program, by now deployed, is fingered as a contributing factor to the destabilization in the Soviet Union. Your task: to maintain a watch over the U.S. SDI satellites, deal with rogue launchings by the Soviet rebels and somehow keep the world from blowing up.

I report this all diligently but must admit that this particular interactive movie's premise is such that keeping a straight face takes some effort, not unlike reading the plots of some of the 1980's Red scare movies and books.

So how is it as interactive fiction? It has scope, it has urgency, players get involved, but it is most definitely not an interactive movie. It bears a strong resemblance to the macrocosmic games I've been looking at every month here: games like Starflight, Star Fleet I, and so on. It's not bad company to be in, but I suppose we expect more out of CinemaWare than this. You go on forays in your starfighter, with pretty standard arcade-style action. Satellites must be repaired over a wide area, which certainly require planning, coordination and wits. There's also docking, and actual SDI-type shoot-em-downs (as opposed to

shoot-em-ups?) I didn't do that well. My arcade reflexes aren't what they used to be. Hey, aren't the computers themselves going to do all the actual blasting in the final SDI program? What will the humans do--sit around and twiddle their thumbs? Worry? Write new code? Seems someone could dig into this more...soon this stuff won't be an arcade game anymore!

Redeeming qualities of SDI include the willingness, once again, to write to the emerging 16-bit standard. This means sharp graphics, serviceable sound, crisp user interfaces, and an overall wider user bandwidth than software which must be C64d into submission, if you know what I mean.

So, a pat on the back to director Kellyn Beeck. Let's see what Beeck can do next.

The real surprise in the series so far has got to be King of Chicago, by Doug Sharp of Chipwits fame. Happily, Microcosm's Macintosh Plus arrived just days after the game did, and I immediately took a look.

What I saw was the fulfillment of something Chris Crawford had talked about more than two years ago: software about people and how they interact. King of Chicago isn't just a Al Capone-era shoot-em-up (an arcade game out currently, whose name escapes me, fits that label nicely). Instead, it's a montage of nicely-defined Silver Screen drama, with users controlling the behavior of one Pinky Callahan, a would-be gangster chief who faces one hard choice after another on his climb to the top. Pinky comes to life through Doug Sharp's innovative Dramaton, a way of animating faces not unlike the effects one used to see on Monty Python's Flying Circus: detailed faces with eyes, mouths, chins, arms and hands animated. Whereas on Monty Python

this was always used to comic effect, here it conveys facial expressions, emotions, reactions to Pinky's actions. Reading the eyes of the other characters can mean staying alive versus winding up dead in the next scene.

And that is what separates King of Chicago from all previous computer games, and fulfills the promise of CinemaWare. Plausible human emotions, set against a vivid cinematic background, even appropriately played out on the silver stage of the Macintosh. (And may I be the first to oppose any colorization of King of Chicago, either for the Atari/Amiga or, heh-heh, on the forthcoming color Macintosh!)

That cinematic background includes effective use of such techniques as closeups, full-room shots, and fadeouts. During transitions, bold lettering fill the screen. Admittedly this plays like a silent movie. Despite a few digitized sounds such as gunshots, all narration and dialogue is in writing. You choose between two or three thought bubbles appearing next to Pinky to control his behavior. It would be nice if the character would then "say" those lines, as well as the spoken ones by all characters, but I guess we'll have to wait a while before the first CinemaWare talkie.

Others have already said that people will either love King of Chicago or hate it. It's that radical a departure from traditional computer games. I love many radical departures, and I love this game.

Stocking stuffers

It's a little late (as is this issue...okay, it's very late) to talk of stocking stuffers, but I've got an excellent one. It's

Smash Hit Racquetball from Primavera Software (the address was given in an earlier Microcosm.) For only $14.95 you get one heck of a sports simulation for the Macintosh. It's like an interactive movie in that both racquetball players move around the court and assume various poses (larger, smaller, standing, bent) trying to retrieve a ball that seems to have a life of its own. Game play is a bit complex, especially if you've never played racquetball. But otherwise Smash Hit Racquetball looks like a smash hit.

Portal: Database as computer game

In my other life as InfoWorld journalist I specialize in covering database management systems...life isn't all fun and games, y'know. So it is intriguing to find a new game that is a database in most senses. It's true that all computer games, especially traditional adventure ones, contain data organized in some way; but we think of them as electronic novels, dramas or (now, as we've seen elsewhere in this issue) movies. But database entertainment? Believe it. And the source is Activision's new game, Portal. (Yes, the same one that was on Stewart Alsop's Vaporlist for months and months. Activision in its press release said they presented him with the first copy!)

Portal is the brainchild of Rob Swigart, a published author who happens to have written one of my favorite books, called Little America. Gilman Louie, who championed the MSX computing standard a couple of years ago, probably deserves credit for most intriguing user/game interface, and Brad Fregger was the producer.

In the game, you find yourself sometime in the distant future, returning from an apparently failed mission to 61 Cygni. Because you were in cold storage and Einstein's relativity theory holds true, it is impossible to say how much time has passed since you left early in the 22nd century. But you find Earth is devoid of people (no mention is made of any animals or other life, at least at the start).

Finally, you discover an on-line computer terminal you can operate. Through it you contact Homer, the ultimate living computer. Together you and Homer have a mystery to solve--what happened to all the people? There's my also a time limit, although initially you don't know how much time you have.

The world of Portal is inhabited by strange and fascinating data. Gradually, as Homer recovers its memory after long years of disuse, you begin to piece together history from the 1990s forward. Apparently a terrifying genetic disease hit mankind at the same time that powerful new weapons, including a kind of brain neutralizer, came into use. Then one of the Earth's citizens by accident comes in contact with the Portal. Beyond that I cannot say what happened, partly because I myself don't know yet.

As he does with his best books, Swigart stirs a little bit of everything into Portal. Ancient mythology, in the form of the tryst between the weaving girl Vega and the herd boy Altair, plays a role. H.P. Lovecraft, who wrote about the dark side of the supernatural early in this century, is mentioned. Swigart even works in Edwin Markham's poem, "The Man With the Hoe," which brought a smile to my face, having acquainted myself with

Markham's work while at San Jose State University (I got my B.A. there and Swigart teaches there).

There's lots of speculation about how life will be like in the next 100 years, and some of it reflects the thinking of prominent science-fiction writers today. Writers such as Greg Bear and William Gibson have pioneered a genre known as "cyberpunk", which focuses on man-inside-of-machine or machine-inside-of-man themes. Portal continues this questioning with its intriguing blend of the human and the cybernetic sides of mankind's evolution. This game is bound to provoke some good discussions on CompuServe's Game SIG.

Portal looks like a labor of love. It's non-linear enough to satisfy the seasoned adventure game players, and linear enough to appeal to book nuts such as myself. (Contrast that to a new Mindscape adventure game, Indiana Jones in the "Revenge of the Ancients," for the Macintosh. I can't even get out of the first room without dying of poison gas, and there's absolutely no help at all. This is entertainment?)

I also applaud the work that went into the graphics. Smooth scrolling techniques have given recent Commodore 64 games a polish that leaves IBM PC game software in the dust, as far as look and feel. But more important, you have to see the Portal screen. Windows and icons have never been used so effectively in a Commodore 64 game. What's more, they've been used damn little in most database management systems I write about for the DP crowd. You always know where you are in Portal, thanks to the hierarchical icons that pop up in the lower left hand corner. It takes a little getting used to, but not much.

I understand that there may be a Portal novel in progress by Swigart. It will be interesting to see how he transfers the world created here into old-fashioned linear text. No doubt he will employ the standard writer's techniques of skipping around a lot. Somehow, I like the computer version better. Could Portal be the start of a big transformation in modern fiction? I'd put more money on this than I would on some of the puzzles-within-puzzles that pass for interactive fiction these days.

Scott's Christmas wish list

I wish my Apple II GS would hurry up and get here. I ordered it a month ago. Being an Apple II columnist without an Apple II is embarrassing.

I wish someone would invent a hard disk that you could pick up without worrying about causing a head crash.

I wish that hard disk had all the connections and cables needed to connect it to any computer I have here at Microcosm. The SCSI interface on the Apple Macintosh hard drive might be the start of a way to get there. But what I want is a way to partition a SCSI hard disk to run my favorite Atari/Amiga/IBM/Macintosh software all on one hard disk, instead of buying 17 of the darn things.

I wish everyone--software developers, the public, game enthusiasts and other journalists--would stop trying to pick a winner in the home computing market. I wish Atari enthusiasts could wish their Amiga-using friends a Merry Christmas and vice versa, instead of attacking each other's hardware on the bulletin boards.

I wish someone would tell me if there's any reason to get a Radio Shack Color Computer. Tandy's Ed Juge says they're selling like hotcakes. Are there any decent games? Can anyone name one major games company converting anything to the Color Computer? Otherwise, why in heck are people buying the darn things?

I wish IBM would stop thinking about selling a home computer with an EGA card. What a lousy development that would be for the gaming world.

I wish developers would use 1987 to think seriously about dropping copy protection on entertainment software, or at least make it possible for poor slobs like me to run their favorite games on a hard disk, with a generous number of installs. If publishers don't start (a few have) they're going to find they're selling tremendous new sagas that are always accessing the floppy disk.

But mostly, I wish all of my readers a very merry Christmas and Happy New Year. The growing subscriber list means I must be doing something right.

And now, a novel idea: computer literature

By EDWARD J. SEMRAD
Special to The Journal

VIDEO ADVENTURES

Software Reviewed: "Portal," by Activision; "Computer Scrabble" by Electronic Arts; and replacement Nintendo joysticks.

WITH THE BUSY holidays now behind us, it's time to put on our thinking caps. This week we have a few games for the mind. A new version of "Scrabble" is coming out. Perhaps you would rather skip games entirely. How about curling up with a good book? No, I'm not getting into book reviews, but there is an excellent computer novel now available. Finally, replacement joysticks are coming out for the Nintendo system.

Almost everything is being computerized these days. We have computer board games ("Scrabble," "Risk," etc.), computer psychologists ("Alter Ego," "Luscher Profile") and now Activision is introducing computer literature. Their first attempt at a computer book is entitled "Portal." There is no mystery to solve, no clues to find, and nothing difficult to do. You just load the first disc and read. And read. And read ... The novel is long! It takes five sides on three discs to hold the entire book. That isn't to say it is boring. Just the opposite. If you like a good science fiction story this one will keep your interest until the very end.

Portal takes you to the year 2106. Having returned from an unsuccessful 100-year voyage to the star system 61 Cygni you discover that the entire population of the planet Earth has disappeared. You locate an operating computer terminal and start scanning the historical records of the vanished civilization. Unfortunately the worlds data bases are in disarray and you must piece together parts of the story from 12 different files. Slowly, the thread of the story begins to unravel and you find that there is one survivor on Earth — a biological computer called Homer. Through Homer, who is the storyteller, you trace the movements of a boy named Peter Devore. He is the key to everbody's disappearance. But how can only one mere boy cause billions of people to vanish? You'll have to read it to find out.

"Portal" is an outstanding book. If you like sci-fi, you'll love it. It is guaranteed to be worth your while, but expect to put at least a week into it. The only problem I found relates to the Commodore computer. Disc access, as everybody knows, is slow, and most of the time is spent waiting for the various files to load. That becomes frustrating because as you get to a good part you find yourself waiting a minute for the next file to load. Despite this minor problem I can still recommend this software.

Scrabble is one of the most popular board games around. I would bet that almost everybody has a copy. Now, Electronic Arts is bringing it to your computer. The rules are the same-form interlocking words, in a crossword fashion, trying to get the most points by using your letters in combinations and locations that take best advantage of the letter values and premium squares on the board.

You can play against the computer or with three of your friends. I personally like matching wits with the computer, since it is a strong player. With a vocabulary of more than 12,000 words (Commodore version), it is hard to beat. Fortunately, you can even up the game, since there are eight skill levels and you can handicap the computer by changing the level. As a guide, the computer will score about 200 total points at level 1 and 400 points at level 8. Overall, the game is true to the original and it will provide countless hours of enjoyment. You also will never have to worry about scorekeeping, lost tiles or cheating again. The computer keeps track of everything.

There is one thing you should know: The game isn't new. Back in 1984, Epyx was selling the Commodore version and Ritam offered the Apple version. Both Commodore versions claim to have a vocabulary of 12,000 words, but the Ritam Apple version has 36,000 words while the Electronic Arts press release gives a vocabulary of only 20,000 words for its Apple disc. In addition, E.A. plans to release an IBM and a Macintosh version in the future. If they can't put more than 20,000 words into memory, I suggest you skip these versions. Both the PC and Mac could easily support the entire "Scrabble" dictionary.

If you've been having problems with your Nintendo controllers, help is on the way. For months I've been hinting that another company might very well come out with a real joystick for the NES, and sure enough, Wico this month is shipping its Wictendo. About the same size as its version of the old Coleco stick, the Wictendo will give you true and precise control of your on-screen objects. The suggested retail price will be under $30. Toys 'R Us should be carrying it.

Epyx is planning to release its version of a Nintendo joystick this spring. It will have the same shape as its popular, contoured 500XJ model and also will sell for around $30. I'll have a review of both of these sticks later this month.

Edward J. Semrad is a Milwaukee-area technical writer, computer specialist and video game whiz.
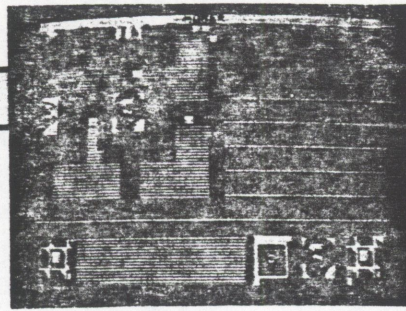
AFTER HOURS

by Neil Shapiro
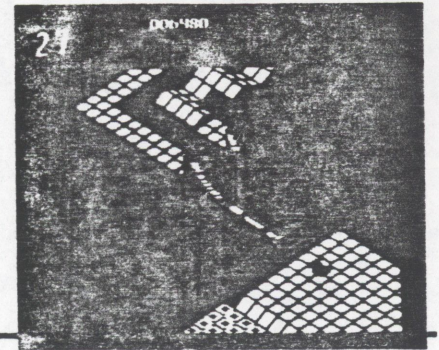
OF REVOLUTION AND EVOLUTION

*Extraordinary
Rave Review!*

PORTAL

Few games can be described as truly revolutionary in scope and execution. I have been playing games on the Apple ever since they sent it packaged with an Appletrek tape back in 1978. In those years, I think I've only used the word "revolutionary" in connection with the release of the games Wizardry and Ultima. So, please don't think that the next sentence is simply fluff from a reviewer who doesn't watch his adjectival phrases.

Portal, from Activision, is a revolutionary new game that absolutely redefines the boundaries of the gaming experience.

Have you heard terms such as "interactive fiction" or perhaps "electronic novel" and learned to take them, as have I, with more than a few grains of salt? Usually, such terminology simply translates to an adventure game. Most adventure games bear no more relationship to the depth of characterization of a good novel, to the plotting, the evoked mood and the response of the reader than a Saturday morning cartoon show does to the collected works of Charles Dickens. Up until now, there has been no successful attempt to move real Literature into the computer age.

Portal uses a unique "operating system" to become the computer age's first work of Literature. The authors of this program, Rob Swigert and Brad Fregger, have succeeded in using the computer to communicate concepts and emotions that until now, have only been conveyed by the written word or by the visual media of stage and film. I believe that Portal may possibly prove to be to computers what moveable type proved to be to books. What a crazy thing to say, huh?

I'm now going to attempt to describe what Portal does. But it is not a thing easily communicated by static words. It's something you will have to experience on your own to appreciate.

Portal is set in the world of the late twenty-first century. You have returned to Earth from a mission to the stars. Only one thing is missing — all of the people. It's up to you to piece together what happened.

This is done by using the still existing, but fragmented, Worldnet computer systems. You log onto Worldnet via an archaic computer terminal that you've found still in operable condition. Forget any niceties you have come to expect, such as a holographic monitor. You're back in the days of 2-D monitors now. And yet, Worldnet is still recognizable as the state-of-the-art, twenty-first century computer system it really is.

The interface panel, although two-dimensional, is a familiar point of entry into Worldnet's 12 database areas as well as a means to contact the AI (artificial intelligence) node. Luckily, one of the first things that happens is that you make contact with that AI node, whose name is Homer and who'll serve as your helper and guide through the maze-like, and often ruined, corridors of Worldnet's shattered mind.

As you learn to use the interface panel and to explore the various databases, you may recognize that such things as windows and multiple "levels" of command choices by choosing icons are based upon today's Macintosh-style of interface. While the keyboard can be used to select all the various on-screen aids, an optional joystick comes in handy. The one design feature missing in the game, however, is the use of a mouse. Too bad, as that would be the controller of choice. Well, I guess no mice survived until the twenty-first century.

Homer will bring bits of Worldnet back on-line for you so that, at various times, more and more information will be presented to you in the databases. These databases are Central Processing, Homer himself, Psychology (psych profiles of citizens), Edmod (records of educational aptitudes of citizens), Life Support (time-stamped, physiological data on citizens), Wasatch (genealogies of citizens in the Utah region of the Western Alliance), History, Military, Psilink (records of PSI powers of various citizens), Scitech (science and technology), Geography and Med10 (medical info).

The graphic interface presents each of these databases as an icon. The joystick or keyboard on your Apple (which represents the ancient computer terminal) scrolls to the various icons to select the database you wish to examine. Within the database, you can select the title of an informational tidbit. Once selected, a window will appear that you can scroll through to read the contents. In this manner, you are presented with an ongoing story that gradually becomes clearer, slowly building into a true overview of the many characters involved and the world they lived in.

Even the smallest bit of information is achieved in a manner so well orchestrated by the program's authors that, as a reviewer, I do not intend to ruin this experience by detailing any of the actual story. Suffice it to say that the story itself is spellbinding. It draws you into that plot in such a way that your definitions of what might or might not be possible for the future of computers and society will be challenged and stretched.

You will not be solving difficult puzzles when you play Portal. There are no mazes to map, no monsters to fight. There are no hit points, and no arcade skills are needed.

What you get when you play Portal is an experience the like of which has not existed before. You get to be one of the first people to use a computer system to act out mankind's aspirations. If you want to utilize a computer from the late twenty-first century, you only have two choices. You can live for another hundred years, or you can buy Portal. I recommend you hedge your bet and go out and buy a copy of Portal today!

Portal is published by Activision Entertainment Software, 2350 Bayshore Pkwy., Mountain View, CA 94053. Included are three disks (!), a manual and map. A joystick is optional. For more information about Portal, circle number 100 on the Free Information card.

ON-LINE

SOFTWARE REVIEW

Scott A. May

PORTAL
Activision Inc.
Written by Rob Swigart
Programmed by NEXA Corp.
Disk — One player
Reviewed on Commodore 128/64
Also available for Amiga, Atari ST,
    Apple II, IBM PC/PCjr,
    Tandy 1000 and Macintosh

Interactive computer fiction has proved to be a viable form of creative expression during the past three years. Authors of novels converted to computer programs include Ray Bradbury, Arthur C. Clarke, Isaac Asimov, Douglas Adams, Michael Chichton and Alan Dean Foster.

Some works employ graphics, while others prefer to illustrate entirely in the readers' imagination. The end result is the same: the unique opportunity to participate in a *living* novel.

What direction interactive fiction will take in the future is a fascinating idea to ponder. But for now, the latest in state-of-the-art electronic novels is **"Portal,"** an ambitious experiment by Activision. Staggering in size and scope — five complete sides of three disks — "Portal" is computer fiction of epic proportions.

What will surprise (and perhaps shock) many fans of computer fiction is that "Portal" is *not* interactive in the traditional sense. It is more akin to the recently-popular novels on audio cassette.

"Portal" is a fundamentally pure electronic novel. Although this may seem less than sophisticated to some, the fascinating storyline and unique graphic representations draw the reader in and don't let go. The only thing missing are the tiresome word games that many so-called computer novels substitute for creativity. "Portal" is user interaction at its very best — interactive imagination.

The story behind "Portal" is classic science fiction, straight from the Twilight Zone.

The time is the distant future, the exact date unknown. You have returned home to Earth from a 100-year voyage to the star 61 Cygni, your mission aborted. The solitude of deep space is a omen to what you are about to discover: everyone on Earth — its space stations and lunar bases — has vanished. You are completely alone.

Circling the planet before landing south of Chicago, you find no trace of violence, war or destruction. There are no signs of plague or natural catastrophe. The rivers, forests, lakes and oceans remain untouched. The towering cities still stand as ancient monuments to humanity. But there are no people.

Months pass before you find an entrance to the underground. What began as a movement before you left had apparently turned into a full-scale migration. Yet there is more desolation underground — levels of empty corridors and abandoned living quarters.

Finally, you discover an old-fashioned computer terminal, still online. The operating instructions speak of the WORLDNET, a vast computer data base, and something called "mindlink." Through WORLDNET you begin to access HOMER, the world's first "living" computer. With the computer's assistance, you must piece together the events that lead to a lost civilization. But HOMER is "dying," steadily losing power. You must work fast or face eternal isolation.

"Portal" begins as a mystery that grows more bizarre with each passing minute. You are thrust into the story completely cold, with only a cryptic manual called the "WORLD-NET Emergency Operating Instructions." What it all means will only become clear with time, which you have precious little of.

Because the storyline is so obscure at the beginning, interest is initially propelled by the program's imaginative graphics and psychotic sound effects. It is literally quite maddening until you get a grip on some tangible threads of plot. Once hooked, however, it's very hard to stop. This is the type of program people will definitely lose sleep over.

When the sub-plots take hold, "Portal" moves along briskly. The action is chronological and time becomes a factor. Although the story is profoundly structured, the pace in which it unfolds is entirely dependent on how logically you interpret what you read. Its interactive quality is not unlike a scavenger hunt for knowledge.

The user interfaces with the novel through joystick input to select various data banks, menus and options. The program's graphics are diverse, colorful, and in many cases, genuinely unnerving. Combined with the outlandish sound effects, "Portal" exhibits a futuristic, nightmare environment.

"Portal" is a huge, complex novel that will take weeks, perhaps months, to unravel. But it is thoroughly enjoyable and well worth every second. If you are looking for something truly original in computer entertainment, "Portal" signals the wave of the future.

the Church of Satan. He is made into a Servant, one of the zombie slaves sold by Resurrection, Inc. But he's different. He keeps having flashes of memory from his first life...

I recommend **Resurrection Inc.** to you. I'd like to recommend it "highly," but I can't, quite. There are a number of irritating problems: a fascinating subplot that vanishes (by the "they all got run over by a train" method) about a third of the way through the book; a number of characters who seem to exist solely to fill their functions in the plot; and a rather cliched "the underground resistance movement strikes the Bad Guys down" ending.

Contrariwise, it's full of beautiful stuff, from the Servants themselves to the image of San Francisco Bay completely built over; and it's well-written and engaging. You care about the characters. So I can hardly pan it either.

All I can do is say, check it out for yourself. If your tastes are even vaguely like mine, you'll probably like, but not love, it. Which is, after all, more than most first novels ever deliver.

Portal

Something appeared in my mailbox a little while ago. Something called **Portal**, by Rob Swigart.

It's not a novel. Richard Lupoff praises it extravagantly on the back cover, but he's quick to point out that it's not a novel. And he's right, for reasons that bear some looking at.

Portal has two main plot lines. The outer "framework" is the story of an Intrepid Starship Explorer, who returns to Earth and the place is closed. Well... deserted. No signs of destruction, war, plague, or anything else greet him; there just isn't anyone around.

So the nominal "plot" of **Portal** is the story of this man's efforts to find out, through a still-functioning worldwide AI network, what happened to all the people.

The second plot, of course, is What Happened To All The People. This is the story of a doomed love and the extraordinary lengths a boy goes to to redeem it and meet his girl. He ultimately opens the Portal for mankind, about which I will say no more because it would spoil much of the story's ending.

Either of these would have made an exceptional novel. (So, for that matter, would the story of the AI's, abandoned and without purpose, not knowing where their masters have gone or why they have been left behind: and then this sole human appears from space...)

Unfortunately, none of these stories is told. Instead, they are mished and mashed together by the presentation of small chunks from here and from there that, hopefully, add up to the story: a technique borrowed from Dos Passos by way of John Brunner.

This technique is tremendously demanding of both reader and writer. When both put the effort into it, it can be incredibly rewarding. In this case, however, it simply isn't worth the reader's effort because Swigart does not know how to handle it.

With the "Dos Passos presentation mode," every section is in some sense a scene, and each scene must count, must have emotional impact. Many of Swigart's sections are recitations of fact, as dry as a passage from Asimov's "Encyclopedia Galactica:" fascinating ideas, but not scenes by any stretch of the imagination. After a few of these, the going bogs down; after enough, the story grinds to a halt. Nor is it at all helpful that some of the information in these sections is presented several times from different perspectives.

I suspect that some of the problem stems from **Portal**'s unusual genesis. It has been released simultaneously as a computer game where the player takes the part of the returning astronaut, and has to interrogate the AIs to find out "what happened to the humans." If the game is designed at all well, there are numerous paths to the same ultimate end, and some vital information would have to be planted in different forms along all those paths.

Many of the expository sections of **Portal**-the-book seem to be dumps directly from the computer game, with no editing.

All in all, **Portal** is a book of fascinating ideas and characters, and several brilliant plots hidden among the clumsy exposition. Swigart shows ability to plot, and to write, throughout. One can only hope his next book is a novel. It should be pretty damn good.

Closet Classic

Sherman, set the Wayback machine for...1978. No, make that 1967. Or...?

In '67, Harlan Ellison's incredible **Dangerous Visions** anthology appeared, and sold so well, and was so acclaimed, that he was pressured by the publisher into doing a sequel. The sequel, you may recall, was **Again, Dangerous Visions**.

A,DV contained a story by Richard A. Lupoff, called "With The Bentfin Boomer Boys on Little Old New Alabama." This was one of the two or three most dramatically experimental pieces in a huge book that was noted for experimentation, during a period noted for experimentation.

That was published in 1972, after several delays. The delays cost Lupoff dearly.

You see, Dell Books had wanted Lupoff to expand "WtBBBoLONA" into a novel. Lupoff wanted to expand "WtBBBoLONA" into a novel. Ellison wanted Lupoff to expand "WtBBBoLONA" into a novel.

But time got messed up, and by the time A,DV was published, Dell was not as interested as they had once been.

In fact, it took them until 1978 to publish the book, which had been through several metamorphoses and finally emerged under the title **Space War Blues**.

This is the novel, then, that a young Dan'l Danehy-Oakes set his sweating hands on in that summer of 1978 and was lost in for days. I must have read it three or four times before I could bring myself to read anything else; it impressed me that much.

What is it? It's a spacegoing Catch-22 with voodoo; it's a space opera with yuks; it's one of the funniest, saddest, baddest, and maddest books I've ever read,

Sleepy downtown Palo Alto awoke early that morning. Despite the damp chill in the air, Hamilton Avenue was bustling with activity. Everyone was there. After all, it's not every day that you can see the stiff, stocking-clad legs of developer Margery Lomax sticking out of a dumpster in front of her latest condo project.

Mrs. Lomax wasn't known for her community spirit, but that was no reason to push her out of a third-story window where an early morning jogger discovers the corpse. But then again, she was responsible for the demolition of several beautiful Victorians in the downtown area and had many enemies. Most anyone who cared about Palo Alto would have been happy to see her dead.

with the witness.

Misinterpreting Drake's interest in her, Bridget is convinced she is the number one suspect and decides to do some sleuthing on her own to help clear her good name. Besides that, it gives her something exciting to do while caring for her small pack of children since she's been feeling like a baby machine lately. She hopes the sleuthing will motivate her into finding a part-time job.

Since Margery Lomax has many enemies, Bridget is faced with a long list of possible suspects. Margery's husband, Fred, had the most to gain by her demise, as he was having an affair with his secretary and had gambled away all his own money. His inheritance from her death would more than cover his debts.

but would not inherit a cent until he held down a job for a year and a day, a highly unlikely event.

Claudia Kaplan, an eccentric writer and Bridget's mentor, makes a likely suspect since it's discovered that she publicly threatened Margery Lomax and was writing a highly critical manuscript about her life at the time she died.

Other suspects include Melanie Dixon, Bridget's incredibly Yuppie friend who leaves town suddenly, Martin Hertschon, the well-known community activist who is opposed to almost everything that requires change, and the street people who often used Margery's construction sites as temporary

pentings in the book has not been changed to "protect the ambience." The press release from the publisher, Perseverance Press of Menlo Park, describes Palo Alto as "a bustling village and hip backwater, home of Stanford University and wellspring of Silicon Valley," where pre-earthquake Victorians rub uneasy shoulder with high-tech offices and condos." Sounds a little more exciting than the Palo Alto I grew up in.

Part of the novel's charm is the local setting. Bridget's adventures take her all over Palo Alto, from the community gardens to San Franciscquito Creek and the Menlo Park border. It's fun to read a book that

Back to the 21st century

by Don Kazak

Portal, by Rob Swigart; St. Martin's Press; 346 pp.; $18.95

What will the world be like 100 years from now? What technologies will have made our current technologies seem awkward and ancient? What will people fear when all disease is eradicated, wars cease, and basic human needs are supplied by a worldwide computer network?

Redwood City novelist Rob Swigart poses his own answers to those questions in "Portal," his sixth novel and perhaps his most successful since the acclaimed "Little America," which was a gas. "Portal" is a little less of a gas, is not playful, but is downright intriguing once the reader gets used to the structure of the novel, the new words and the new scientific and technological concepts.

"Portal" is the story of an astronaut returning to earth (and consciousness after being in a suspended state) in the year 2106 after his trip to a distant star was somehow aborted and redirected.

The earth that the astronaut/narrator returns to is a rather puzzling one—no one is home, literally. The entire human race has vanished, not dead like in a cataclysm, but gone as in adios.

The puzzled astronaut, still alive 102 years after his launching and presumably not much older, since his ship was traveling at virtually the-speed-of light, finds that the earth is a peaceful but empty place. Civilization had largely moved underground (to "warrens") in the 21st Century, although the remnants of a few large cities still remain, like Chicago.

In Chicago, he finally finds a working computer terminal that is hooked into "Central Processing," a worldwide computer network, and through trial and error begins to punch up data that tells him what happened to the world in the 21st century.

The worldwide computer network was undamaged, humming quietly on standby,

PORTAL

ROB SWIGART

waiting to interface with someone. The network also has "Homer," a holographic storyteller who takes the technical data and turns it into a story.

Thus Homer, aptly named, becomes a joint narrator with the astronaut and, in the end, the real storyteller. And the story is told in bits and bytes of computer information as both Homer and the astronaut try to reconstruct the "migration," why everyone left earth, how they did it, and where they went. Along the way, the story of earth in the 21st century is told, and it's not a bad story at all, even if the structure is kind of awkward and dry. But then, a computer is telling the story.

The story is of a world where all needs are satisfied by a benign computer network that monitors all life constantly, a sort of ever-present and presumably kindly Big Brother. But it doesn't seem to be a whole lot of fun. Boring, in fact.

Faced with the certainty that each and every one of them will live to be 114 years old and not have to worry about material needs, the people begin turning on each other in the late 21st century in what are called the "mind wars," in which to be wounded is to be turned into a simple-minded "yam" without the will to live.

The world in the 21st century does have a common enemy, however. Or if not an

Revolting Development

(continued from page 27)

describes the cafe a few blocks from your home and other places you pass every day without a second thought.

Despite Smith's claim that the book is peopled by fictional characters, you can't help but let your imagination run wild trying to figure out which planning commissioner is most like Margery Lomax, which policeman was the inspiration for Detective Drake, or which local newspapers are being described as the Redwood Crier and Peninsula Times.

Smith's novel is light, quick reading full of witty observations about the Bay Area suburban scene, believable dialogue and peculiar, yet likeable characters. The mystery itself is not as complicated as most mystery addicts would prefer, but it has its twists and is not at all obvious.

Smith's first mystery may not be as suspenseful as those of Agatha Christie or as humorous as Gregory MacDonald's "Fletch" series, but the local angle makes it unique and worth reading.

Kelly Short is one of the Weekly's movie reviewers.

Portal

(continued from page 27)

enemy, a people apart who are feared and loathed by the rest of the world. They are the residents of Antarctica, called "Ants," 100 million strong who have developed their own society somewhat free from the monitoring of the Big Computer, since they live under ice.

The Ants are a freedom-loving sort, fiercely independent with strange customs and capabilities, and somewhat mysterious, since so much about them is unknown. One example of their degree of development: They can change themselves by manipulating their own DNA.

The plot involves a small band of folks from central Illinois that goes on the lam with an Ant sent to bring them to Antarctica because one of them, Peter Devore, is a young genius who understands that there are many more dimensions than the standard four. Eleven, in fact, which includes out-of-body travel to the distant dimensions. Where there are people living. People can get there, Peter determines, but first they have to find Terminus, the key to finding Portal, the entry to the other dimensions. Finding Portal would be useless unless a huge, powerful Anomoly is also found and made use of.

Peter intends to do just that with the help of the Ants, but the government (or computer company or whatever) figures out what he's doing and tries desperately to stop him, even invading Antarctica unsuccessfully.

I'm still not quite certain what the other dimensions are or why Peter wants to go there. Maybe because it's there. And it does involve a conflict between good and evil. You know who wins.

Homer does his best to liven up the story by taking liberty with the facts, chastizing himself for taking liberty, and becomming more and more human as the book goes on. An example of Homer:

"HOMER COMMENTARY 060621060042274

"What do they know. Their data has no energy, no life, no passion! Dry, dry, dry. Just facts! So and so said such and such. Enzyme levels thus, quickly changing to that, indicating excitement. Whatsisname did this, then someone else did that. Hohum. It has no meaning! You (if there is a you) understand, I'm sure. No sizzle! And boring. Facts are nice and all that, but they aren't life.

"HOMER COMMENTARY 060621060004276

"What am I saying? What do I know of life?"

Quite a lot, by the end. Look at it this way, Homer. Someone has to tell the story. I also liked the way you, a self-described "limited AI," took over Central Processing. Nice work. ∎

Don Kazak is the book editor of the Weekly.

Mystery writers come clean

How do the whodunit writers do it? Kepler's Books will present five Bay Area mystery writers in a panel discussion at 8 p.m. Thursday, May 19 on the craft of mystery writing.

The writers include Palo Altans Edward Cline ("First Prize") and Lora Smith ("Revolting Development"), along with Robert Bowman ("House of Blue Lights"), Jerry Kennealy ("Polo Solo") and Lia Matera ("Radical Departure").

Kepler's is located at 821 El Camino Real in Menlo Park.
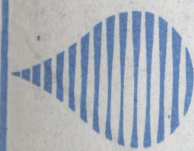
New Releases

John Cook looks through this week's new arrivals

System addict

Amstrad CPC

Program *Hyperbowl* **Type** Arcade **Price** £1.99 **Supplier** Mastertronic, 8–10 Paul Street, London EC2.

Asteroid-type graphics in a interstellar game of penny football. Great stuff.

Program *Dodgy Geezers* **Type** Adventure **Price** £8.95 **Supplier** Melbourne House, 60 High Street, Hampton Wick, Kingston Upon Thames, Surrey KT1 4DB.

More love it or hate it Chas and Dave/*Minder* type humour from the authors of *Hampstead*. Personally . . .

Atari ST

Program *Saved!* **Type** Utility **Price** £29.95 **Supplier** Hisoft, The Old School, Greenfield, Bedford MK45 5DF.

Selection of desktop utilities which include ram disc, print spooler, clock, various disc functions from within Gem and a speed-up disc program.

C16/Plus 4

Program *Panic Penguin* **Type** Arcade **Price** £2.99 **Supplier** Midas Marketing, 35 West Hill, Dartford, Kent DA1 2EL.

The world may well not be clone — but if you want one for the C16/Plus 4 . . . here it is.

Program *The Way of the Exploding Fist* **Type** Arcade **Price** £6.95 **Supplier** Melbourne House, 60 High Street, Hampton Wick, Kingston Upon Thames, Surrey KT1 4DB.

Commodore 64

Program *Nosferatu the Vampyre* **Type** Arcade Adventure **Price** £9.95 **Supplier** Piranha, 4 Little Essex Street, London WC2R 3LF.

Neat arcade adventure nicely done in 3-D perspective graphics. Clever logical puzzles should prove a challenge to budding Van Helsings.

Program *Terracognita* **Type** Arcade **Price** £1.99 **Supplier** Code Masters, 1 Beaumont Business Centre, Beaumont Close, Banbury, Oxon OX16 7RT.

Program *Classic Snooker* **Type** Simulation **Price** £5.95 **Supplier** Anco, 35 West Hill, Dartford, Kent DA1 2EL.

Perfectly adequate snooker game launched at a particularly unfortunate time. It'll be worth checking out Code Master's *Snooker* (at £2.99) before you buy this one.
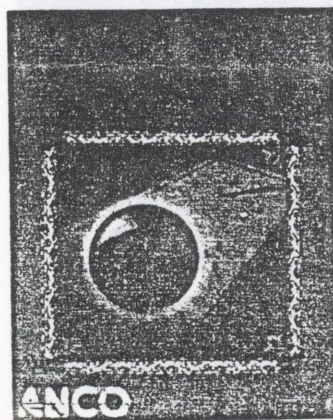
Program *Park Patrol* **Type** Arcade **Price** £1.99 **Supplier** Firebird Software, 64–76 New Oxford Street, London

Program *Portal* **Type** Unique Strategy **Micro** Commodore 64 **Price** £24.99 **Supplier** Activision UK, 23 Pond Street, London NW3.

There are occasions when Activision can come up with something really innovative and outstanding. Think of *Little Computer People*. Was there anyone not vain enough to have been completely fascinated by *Alter Ego*? Now there's another to add to the roll of honour – *Portal*. Programmed by the Nexa Corporation, written by Rob Swigart (soon to be hailed as a visionary from the 9th dimension) this game is everything *Hacker* promised to be – but wasn't.

The scenario, introduced by a well-written, atmospheric, six page prologue (Rainbird eat your heart out) is simple. In 2004, you set out on a lone expedition to 61 Cygni on a sub-lightspeed craft.

Something went wrong as time dilation affected the ship's circuits – and you wake from hibernation not at your intended destination, but approaching Earth orbit. It is the year 2106 and the Earth is deserted.

There is one functional terminal of the massive Worldnet functioning – and as you tentatively try to explore the system, you discover clues as to the fate of Mankind.

Then Homer, the AI section of the computer, comes alive. The machine has amnesia, the machine is lonely – and needs your help to find out where the humans have gone.

It's fascinating. Played by accessing text files from a system of icons, it's beautifully designed as you try to figure out what the hell is going on.

In the initial stages, the Worldnet is divided up into 12 subject sections, which you can interrogate. To start with, most are empty, but fill up as time goes on and your activity gradually brings the machine to life.

Who knows what happens after that – there are three discs to plough through, but the thing has such a strange addictiveness, that hopefully I'll be finding out soon.

Out on Commodore disc now, soon on Amiga, ST, PC and Mac. *Portal* is destined to be a classic.

Old Activision US product being sold off at budget in the UK. Arcade silliness as you play the part of a Park Keeper with all the trials and tribulations that go with the job. (Wot? No muggers?) Chunky VCS style graphics make it look a bit dated.

Program *Dragon's Lair II, Escape from Singe's Castle* **Type** Arcade **Price** £9.95 (tape) £13.95 (disc) **Supplier** Software Projects, Bearbrand Complex, Allerton Road, Woolton, Liverpool, Merseyside L25 7SF.

Gambling is a terrible thing. When *Dragon's Lair Part 1* came out, I bet a king's ransom (£10) that it would not reach number one. It did. Which only goes to show. Socrates *is* a fish.

Program *Erebus* **Type** Arcade **Price** £8.95 **Supplier** Virgin Games, 2/4 Vernon

Decent shoot 'em up with a pedigree as long as your arm. Best zapper so far this year.

Program *Police Cadet* **Type** Arcade **Price** £2.99 **Supplier** Midas Marketing, 35 West Hill, Dartford, Kent DA1 2EL.

Another release from Anco's budget label – and it's a goodie. Licensed from Artworx in the States, it's a 'shoot the baddies without taking out the bystanders' job. On the other hand – if you're feeling particularly violent . . .

Program *Shanghai* **Type** Strategy **Price** £9.99 (tape) £14.99 (disc) **Supplier** Activision, 23 Pond Street, Hampstead, London NW3.

MSX

Program *Timetrax* **Type** Ar-

A novel idea: Let a computer weave a tale

By David Sylvester
Mercury News Business Writer

In a computer-cluttered cottage behind his home in Redwood City, Rob Swigart reads his latest novel, not by pulling a book from a shelf but by inserting a computer disk.

As he reads the "computer novel," actually a $40 computer program called Portal, Swigart assumes the role of one of the main characters, an astronaut returning to a deserted Earth in the year 2106 who traces mankind's disappearance by tapping into a computer system.

As a reader, Swigart searches through a number of data bases containing messages filed by humans watching the spread of a disease. The more the story unfolds, the more the computer program itself seems to come to life to supply missing information.

"Every medium has its own appropriate way of telling stories," says Swigart, a 46-year-old writer and associate professor of English at San Jose State University. "This lets the computer be the narrator."

In the small world of computer entertainment software, Portal has acquired a reputation as a bold experiment. The program was released six months ago by Activision Inc. of Mountain View.

Some say it marks how far the computer software business has moved away from its video-game roots. Ever since the game fad evaporated in 1983 and Atari Inc. collapsed under staggering losses, the industry has sought to expand its market and interest new consumers.

In the past four years, software developers have experimented with interactive stories and adventure or fantasy games, such as Zork, Amnesia, and The Bard's Tale.

But now software developers are creating software that better uses the elements that draw people to movies: plot, characters and suspense. Some software stories emphasize animated graphics, such as Defender of the Crown, distributed by Mindscape Inc. of Northbrook, Ill. Others involve the user as a character who determines the outcome of the story, such as the popular adventure game Hitchhiker's Guide to the Galaxy, sold through Activision's Infocom.

But Portal remains the most striking attempt at a full-fledged novel. "It's the first true novel on a screen," says Frank Penha, manager of HT Electronics in Sunnyvale. HT sold out its stock of Portal, although Penha calls it a middle-range selling title.

Some software reviewers rave about it; others are lukewarm. Bob Lindstrom, a columnist for A+, a magazine for Apple IIe computer users, is a fan of Swigart's software because it puts the reading experience of a novel onto a computer effectively for the first time. He read all the way through the entire package of three double-sided computer disks and their 840K of computer memory — the same as 650 pages of double-spaced typed pages.

The package can take up to 20 hours to read. "I see so much mediocre software, and I think it's a breakthrough program," Lindstrom says.

Critics complain that Portal is too much like a book, that it doesn't involve the reader enough and that it doesn't have the puzzle of a game. Stewart Alsop II, editor of P.C. Letter, a newsletter in Redwood City, is skeptical about Portal, even though he acknowledges it has achieved "cult status" among computer buffs.

"They've started other (software) publishers thinking, but I think there are better ways of doing it," Alsop says.

Joseph Ybarra, vice president of the interactive stories division at Activision's competitor, Electronic Arts in San Mateo, has watched Portal with some interest but favors more interaction in software. "Sometimes I wondered, 'Why bother to put this on a computer?'" he says.

Whatever the reaction to th[e] novel, it has been an expensiv[e] experiment for the money-losin[g] Activision. Portal required near[ly] 14 programmers and cost $150,0[00] to $200,000 to develop, Alsop est[i]mates. That was three to fou[r] times the cost of developing [a] game that would sell for about th[e] same price.

Since then, however, to stem th[e] losses, President Bruce Davis ha[s]
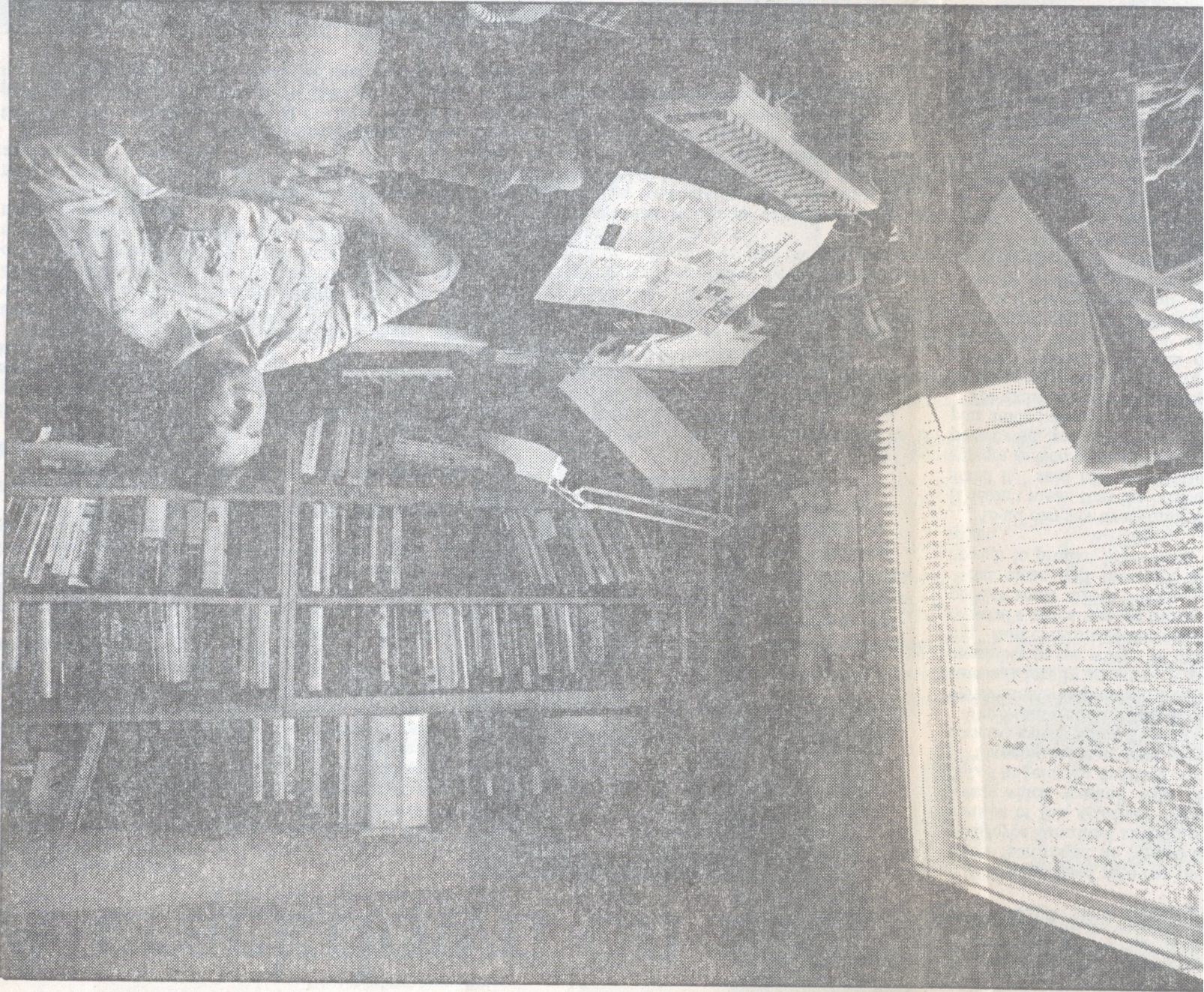
Swigart's 'novel' lets the computer act as narr[ator]

Portal

ACTIVISION

Portal, a computer game written by Rob Swigart, is now available for a wide variety of computers. Already made for the Apple II ($44.95), Amiga ($49.95), Commodore 64/128 ($39.95) and MS-DOS systems ($44.95), it is now available for Macintosh as well, priced at $49.95. For information on other Activision Games, write the company at Box 7268, Mountain View CA 94039.

PORTAL

SOFT
SECTOR
CERTIFICATION
SEAL

Accounts.BAS, a program designed to generate monthly bills and produce matching mailing labels. For the Sanyo MBC-550/555 series only. *James F. Marby, 412 Lebanon Avenue, Pittsfield, MA 01201; (413) 445-4688, $24.95.*

Actor, an object-oriented programming language designed to work with *Microsoft Windows.* For PC, XT and AT Compatibles. *The Whitewater Group, Inc., 906 University Place, Evanston, IL 60201; (312) 491-2370, $495.*

Advantage C++, a program designed to enable programmers to use object-oriented programming methods. Available for use with *Lattice C* and *Microsoft C* compilers. For PC, XT and AT Compatibles. *Lifeboat Associates, 42 River Street, N. Tarrytown, NY 10591; (914) 332-4545, $495.*

Battle Ground, a two-player tactical ground combat game. For PC, XT and AT Compatibles. Also a version for the Sanyo MBC-550/555. *MVP Software, 1035 Dallas SE, Grand Rapids, MI 49507; (616) 245-8376, $29.95.*

Bookmark, a data protection package designed to prevent users from losing work in progress. For PC, XT and AT Compatibles. *Intellisoft International, P.O. Box 5055, Novato, CA 94948; (800) 544-MARK, $69.95.*

The DISKAT 50 Pack, a package containing 50 dual-pocket DISKAT Disk Sleeves and DISKAT Directory Software. The software prints a catalog of file and disk information that fits in the front display pocket of the vinyl sleeve while the rear pocket stores the related disk. *Leinbach Incorporated, 9 Central Avenue, P.O. Box 730, South Nyack, NY 10960; (914) 353-0990, $49.95 per pack of 50.*

Dr. Ruth's Computer Game of Good Sex, a computer version of the popular board game. For PC, XT and AT Compatibles. *Avalon Hill Game Company, 4517 Harford Road, Baltimore, MD 21214; (301) 254-9200, $29.95.*

The IBM XT Clone Buyer's Guide, a book describing the issues that confront those considering the purchase of a non-IBM computer. *Edwin Rutsch, Modular Information Systems, 431 Ashbury Street, San Francisco, CA 94117; (415) 552-8648, $9.95.*

INSET, a graphics and text integrator. For PC, XT and AT Compatibles. *American Programmers Guild, Ltd., 12 Mill Plain Road, Danbury, CT 06811; (203) 794-0396, $99.*

The Lottery Player, a program designed as an aid for individuals who play the various state and national lotteries. For PC, XT and AT Compatibles. *Suzanne Spencer Software, 4176 47th Avenue NE, Salem, OR 97305; (503) 390-6664, $29.95 plus $2 S/H.*

Marketing Edge, a set of 17 applications and tutorials that work with *Lotus 1-2-3.* This program covers many aspects of marketing so it can be used by almost any company in the marketing of a product or service. For PC, XT and AT Compatibles. *SUCCESSWare, Inc., 203 Annandale Drive, Cary, NC 27511; (919) 469-0119, $149.*

Microcomputer Tools ASM, a macro-assembler that supports modular programming and linking. For PC, XT and AT Compatibles, and the Sanyo MBC-550/555 Series with video board and 512K. *MicroComputer Tools Company, 912 Hastings Drive, Concord, CA 94518; (415) 825-4200, $249.*

PCPlot, a high resolution graphics program that makes scientific and business graphs on graphics screens. For PC, XT and AT Compatibles. *BV Engineering, 2200 Business Way, Suite 207, Riverside, CA 92501; (714) 781-0252, $95.*

PEP, a printer emulation package. For PC, XT and AT Compatibles. *Intelpro, 13 Saratoga Drive, Kirkland, Quebec, Canada H9H 3J9; (514) 694-6862, $59.95.*

Portal, a futuristic computer novel. Players interact with the story, exploring the world and discovering the mystery of the Portal. For PC, XT and AT Compatibles. *Activision, Inc., 2350 Bayshore Parkway, Mountain View, CA 94039; (415) 960-0410, $44.95.*

Screen Machine, a screen development system for programmers. Features include the ability to capture and create screens, automatically generate source code, and create demonstration and prototype programs. For PC, XT and AT Compatibles. *MicroHelp, Inc., 2220 Carlyle Drive, Marietta, GA 30062; (404) 973-9272, $79.*

SPL, a procedure-oriented, structured programming language similar to PASCAL, which translates into GW-BASIC code for use in the interpreter or *QuickBASIC* compiler. For PC, XT and AT Compatibles. *Dennis Baer, 25 Miller Road, Farmingdale, NY 11735; (516) 694-5872; distributed as shareware, $50.*

Time Traveler, an educational game that takes you on an adventure through American history. For PC, XT and AT Compatibles. Also a version for the Sanyo MBC-550/555. *MVP Software, 1035 Dallas SE, Grand Rapids, MI 49507; (616) 245-8376, $34.95.*

Vantex Word Version 2.0, a command-driven word processor. For PC, XT and AT Compatibles. *Vantex Data Systems, P.O. Box 507, Chatham, NJ 07928; (201) 635-5686, $119 plus $5 S/H.*

Volkswriter Deluxe Plus Spelling, a word processor with an integrated spelling checker. For PC, XT and AT Compatibles. *Lifetree Software, Inc., 411 Pacific Street, Monterey, CA 93940; (408) 373-4718, $99.*

Words & Figures, a program that combines a *Lotus 1-2-3* (Release 1A) compatible spreadsheet with a capable word processor. For PC, XT and AT Compatibles. *Lifetree Software, Inc., 411 Pacific Street, Monterey, CA 93940; (408) 373-4718, $195.*

Words and Computers

by Paul Statt, Technical Editor

"The last word in writing technology is interactive fiction. I hate it."

In the beginning was the word. Then the alphabet, perspective drawing, the printed book, photography, the phonograph, the movie, and the personal computer, in roughly that order.

People complained; at each technological leap, somebody moaned. "Written stories?! People will forget how to remember genealogies." "Perspective drawing?! It's a trick—people will forget the true relation of God to man." Someone might even have objected to the coming of the word, had he the means to say it.

People had a point: Technological innovation changes the way we think. Marx pointed out that what we do daily and how we do it—the "infrastructure" of our existence—has more to do with who we really are than the "superstructure" of our beliefs. Now microcomputers are changing the way we read.

The last word in writing technology is interactive fiction—a story that isn't a story, a play in which you're the star. I hate it. I'm the 20th-century heir of the medieval skeptic: "Interactive novels?! People will forget how to read, they'll forget what plot is, forget how to tell stories."

I'm twice scared: first, that I'm right; second, that I'm a voice crying in a wilderness. Scribbling a shopping list on the back of an envelope, who really cares that the written alphabet took the poetry out of Homer's *Odyssey*? Who cares that Saint Augustine could have committed the entire inventory of the local A&P to memory, without writing down a word?

Someday reading a novel will be an old-fashioned curiosity, like a guest on *The Tonight Show* who can memorize all the viewers' zip codes.

Who'll care that Herman Melville once wrote a novel called *Moby Dick*, a slow-moving, digressive chase after a big fish they never catch anyway? There's probably an interactive game in which you can nuke the whale, if you're clever.

I hate interactive fiction most because it's bad. I've "read" interactive fiction by poets whose poetry is also incomprehensible (Tom Disch's Amnesia) and by poets who can write gracefully (Robert Pinsky's Mindwheel). But on the video monitor their prose looks like the work of bad science-fiction writers.

My heart leapt when Bard Fregger, a producer at Activision, confided to me, "The dream was to bring literature to the computer, as we brought it to film. We wanted to write the first true 'computer novel'—literature that could be expressed as a novel or as a film, but [was] expressed best on the computer."

"What is literature?" Fregger wondered—he looks enough like a pipe smoker in tweeds to get away with that kind of question—but didn't answer. I didn't know the answer either, but I doubted it was Portal.

Portal is Activision's new interactive game. It's also a database—a representation of the earth's global government in the 21st century—and you, returning from a weary decade or more of space travel, have "booted it up." The database and a "antique" microcomputer are the only artifacts left—all the home folk have fled.

Where did they go? You poke around in the database, with its records and vital statistics, until you figure it out.

The idea of the game, I take it, is that there's one right answer to the question "What happened?" but many ways to get there. (I may be wrong—I've never put up with the empty prose long enough to finish an interactive story even once, let alone in multiple ways.) It's the conceit all interactive games share: Anything is possible. Nothing is written in stone, as the saying goes.

What sets Portal apart is that it's a database. (I don't want to scare away arcade-sci-fi fans—Portal doesn't look like a database. Spooky music emanates from your Apple, and every screen has that indefinable look of the future.) That makes it, as Fregger says, "literature that's best on the computer," although I'm arguing that it still isn't literature.

Fregger was proud to report that he found "a writer" to work on Portal. Rob Swiggart, author of the successful sci-fi novel *Vector* and the mainstream *Little America*, did something with Portal: I'm not sure what. I'm not complaining, though; at least Portal isn't sullied by bad writing, because it doesn't bother with any writing. That's the way to do it.

I'm of two minds. I don't like Portal because I'm a reader. When bookstores become antique shops, I'll take my entertainment there. On the other hand, I like Portal, because it doesn't pretend to be a novel, just as I like photographs that don't pretend to be paintings.

The future scares me, but let's get on with it, and stop trying to re-create the past. ∎

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Portal: Is this Interactive Fiction?

Emerging from the mists of the "Vaporware" list in *PC Letter*, *Portal™* has at last been published by Activision. Having thus established that *Portal* is not vapor, its creator, novelist Rob Swigart, has some further observations about what *Portal* is and is not.

"It's not a game," says Swigart. Nor, apparently, is it interactive fiction as we have come to know it. "There is no parsing language in *Portal*," he adds, "no puzzles to solve."

Then what *is* it?

"It's a computer novel."

And that is…?

"A novel that can be told only through the medium of the computer."

If you could expand on that…

Swigart says "The narrative, the story, is organized like a database of real information, by category—historical data, facts about characters, and so on. In this way, a person's experience of *Portal* imitates the style of traditional kinds of computer use. You uncover the story section by section, layer by layer, learning how parts of the story relate to other parts."

So this is interactive fiction then?

"Neither game nor adventure," writes Bob Lindstrom in *A+ Magazine*, "*Portal* represents an entirely new form of entertainment software."

To its author, *Portal* is the dawn of the new in more ways than one. Says Swigart, "*Portal* is a simulation of future computers—AI systems that will be able to process, filter, and organize information for the user *as an individual* with very particular, even quirky, needs.

"A computer that can forecast the future could also tell plausible *stories* about the future—predictions cast in narrative form. Futurists of today, who realized the importance of intuition some time ago, already engage in this kind of 'narrative' forecasting."

Get the feeling that Swigart has hung around with futurists? He has. In a career that has included a stint as a textbook salesman, a Ph.D. in comparative literature, and a wide range of poetry, essays, stories, computer game scripts and nine novels, he has also written futurist scenarios for the Institute for the Future in Menlo Park, California. His latest novel, *Vector* (Bluejay Books, 1986), has been described as a "biotechnology thriller."

The plot of *Portal* is reminiscent of many science fiction stories. The year is 2106. You—the user, or player, or reader, whatever—are a lone space traveler who has returned from a 100-year star voyage to an Earth devoid of human life. Plants thrive, birds sing, animals burrow but no people. You find a single

operating computer (yours, of course) connected to 12 Worldnet "dataspaces."

As you begin to dip into the data available, you soon make contact with a biological computer named Homer. The sole survivor of a vanished civilization, Homer is your link to the past and your conduit to the future.

Together, you and Homer set out to solve the mystery of an unpeopled world. Your knowledge grows organically. As you uncover bits of data in one category, you're granted access to more and more data in other, related categories. And Homer is enabled to "remember" more and more, as his understanding of the past grows with yours.

You learn, for example, about 21st-century geopolitical affairs; about the fantastic technology of the era, including neurophage weapons, agrobotics, nightvision thermography, and Mozart, the great aesthetic application of neural induction; and about *Portal*, the phenomenon at the heart of the mystery.

Portal is on two or three disks, depending on what kind of computer you have (Activision has released *Portal* for Amiga, Apple II and Macintosh, Commodore, and MS-DOS machines). Also in the box is a "Prologue," written in

"your" voice; a map of the Intercorp Council World Administrative Regions, dated 14 August 2077; and a copy of Worldnet Emergency Operating Instructions, dated 11 November 2088. These are your tools for exploring the world of *Portal*, and solving its mystery.

As you say to yourself in the "Prologue," "I will read the instructions, and then I will try to find out what has happened to the world, where the people have gone, and if I must remain alone for the rest of my life…I have been too long without other people."

In developing *Portal*, Swigart envisioned a future, like any science fiction writer. Here's the twist, though. Placing us at the *end* of the Earth's future, *Portal* challenges us to reconstruct that future as the *past*, so that a new future may begin to unfold.

It also challenges our notions of what "interactivity" in computer fiction can be, and of what "narrative" is, in any kind of medium, and how it works. As futuristic as *Portal* is, it borrows much from traditional storytelling. Readers will not find themselves stumped by difficult puzzles, rather the story unfolds itself with some gentle coaxing. Can interactive storytelling work without challenging puzzles or conflict resolution? *Portal* proves it can.

"Don't 'oh shucks' me, mister! You march up those stairs right this minute and caskly that messy room of yours! And while you're up there, young man, make sure you apologize to your little sister for frotzing her cereal during breakfast this morning!"

Bob Prokop

Computer tells 'Portal' story

By Meg Morris
Special to the Times Tribune

When Rob Swigart was asked by a software producer to use a computer to tell a story, he decided the computer would be science fiction, and the computer would be a participant in it. "Portal," St. Martin's Press, $18.95, is an experiment in "hypermedia."

Swigart says that hypermedia is a buzzword to describe an interactive story using all current possibilities of the computer — text, graphics and sound. The story differs from a game because the user is on this side of the screen; the story is on the other side.

The software version of "Portal" allows choices but is hand-coded and hard-wired, so that the author has retained control. The novel as published is "one path through the story. Another novel could be written using the same data bases."

Swigart compares the present state of the art of hypermedia to the early days of making movies. The practice of producing both software and a book to tell the same story is compared to producing both movie and book.

He would like to get other authors involved in "Future Fiction" and will co-teach a summer workshop of this title with Vonda McIntyre, winner of the science fiction Nebula Award for "Dreamsnake."

Rob Swigart
... writes science fiction.

There are three tracks to "Portable," says Swigart. "It is difficult to get to the story in this unfamiliar and uncomfortable environment."

He advises those who are having trouble with it to "skim through the first pages to get to the story."

A user's manual for the fictional Worldnet computer network, including a glossary, comes with the software. The reader of the book, however, may be slowed down by such words and terms as induction sensorium, biocybernon and external limbic system activation.

Reading, like using a computer, can be interactive — at least in the code right out of me."

The growing friendship with HOMER is the second track. Third is the story that HOMER relates about Peter Devore, a courageous adolescent genius who solved the equations necessary to take people through the Portal.

Although some elements of plot, theme and characters are not new, many science fiction readers are enthusiastic about the book, finding heroism and sacrifice in the story as well as action and suspense.

The concept of hypermedia is an exciting one, but when the same story is put between covers and defined as a novel, style and format are stumbling blocks for some readers. It is a challenge to get through the computer-generated headings of each bit of data and to follow the skips among different data bases.

"Because of the nature of the future world, there's lots of technology," says Swigart, "I."

HOMER, a biological computer. "HOMER starts out as a straight narrator," says Swigart, "then he gets interested in his possible meaning and purpose; he becomes a character."

"HOMER," says Swigart, "You" in the software, or "the astronaut" in the novel, return to earth after an aborted flight outside the solar system and find that all other people have disappeared. Logging on to a computer terminal, the astronaut meets

reader's mind. A reader who wants to have as much fun as the author, might think responses such as these quotes taken from different parts of the book:

Astronaut: "I had no idea what an unterminated transit query was."

Reader: Hang in there, we'll find out in a few pages.

Astronaut: "Why do I do this? I do not know. There is nothing else to do."

Reader: How about reading a good book?

Wanda: "Whom should I save, who is locked away here?"

Reader: The English language?

Ezekial: "What kind of Field? I asked. SciTech offered some equations but I could make nothing of them."

Reader: My point exactly.

Astronaut: "Gyges tells me my psychological adjustment is in peril. I have been too long without other people."

Reader: I believe it.

HOMER: "The data forms small clots around some event. The algorithms concentrate, condense. Scenes form but I can't go on like this."

Reader: Me, either. I wonder what the sequel to this book will be like?

Peter: "Frankly, it scares the code right out of me."

New textbook demystifies the IBM PC

Sit down in front of your new IBM PC ready to be part of the computer age, put your hand on the keyboard and — then what?

To answer that question, reach for "IBM PC BASIC with an Introduction to Structured Programming" by Raphael E. Serebreny, Prentice Hall, $26.67.

"This text begins by assuming that the reader knows nothing about computers or computer programming," says Serebreny.

Whew! Here's an author who understands.

Chapter One gives a brief history of computers, a non-technical discussion of how and why they developed. This helps the novice gain a basis for communicating with the computer literate. A short, well-chosen bibliography is added.

Chapters 2 through 11 lead the beginner in logical progression from "Parts of the Computer" through all steps of BASIC programming, including disk files and the disk operating system.

Each chapter begins with a list of objectives and ends with exercises to test your new knowledge. Answers are in the appendix.

All best seller lists not the same

IN THIS MACROCOSM OF computers and the age of the microchip, I still take pride in the ability and integrity of one mini-mind and five mere humans, especially those who help com-
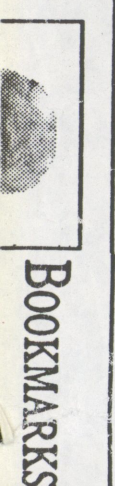
Serebreny, now a business

 Some of the world's oldest and most enduring games have been translated to
personal computers with great success, and there's another that seems like
one of the classics even though it was created just for microchips.

 Activision's Shanghai, available for all major systems, has the look and
feel of a game cleansed and purified by centuries of play.

 But, although it uses Mah Jongg tiles, it is an original - conceived and
programmed by Brodie Lockard, an indomitable paraplegic who uses a stick in
his mouth instead of fingers to write programs.

 Shanghai is a game of reduction - you remove pairs of matching tiles from an
intricately balanced pile until, if you win, there are no more. But it is
very hard to win. This game is so addicting that when my review copy died, I
went out and bought a new one.

 It is interesting to note that while Shanghai has the flavor of an ancient
board game, a moment's thought will show that to be absurd. Only a computer
could set up the intricately laid but randomly arranged stack of 144 tiles
with which you begin the game.

 The origins of chess, on the other hand, are lost in antiquity, but it has
been a part of computer gaming since computers were first built.

 Chess programs for microcomputers keep getting stronger, with more and more
features tacked on. The best I've seen is Chessmaster 2000, from Software
Toolworks through Electronic Arts, for most computers. There are multiple
levels of play, and at its highest Chessmaster is very tough, in the high
class A or expert range. I wish I could have had a program like this 20 years
ago when I was playing seriously; what a grand way to practice.

 It offers a 3-D view of the board that newcomers to the game may enjoy, but
any experienced player will use the more common flat view. With a mouse or a
joystick, you don't have to use the non-standard movement notation common to
all computer chess games; you can select a piece, pick it up and move it.

 The only problem is that the program seems always to respond to P-K4 with P-
K4; not a lot of imagination there. Software Toolworks suggests that if you
want to play White against a Sicilian Defense, for instance, you can use the
player-to-player mode - in which you enter both sides' moves - for the first
two moves and then hand the black pieces back to the computer.

 Bridge is much more of a social game than chess, but Grand Slam Bridge, also
from Electronic Arts, serves much the same purpose as Chessmaster. The manual
warns that it is not mean to be a learning tool, and indeed it is not
intended to teach the rudiments of the game, but there are plenty of features
that will improve your play.

 You can ask for hints on bidding - decide your bid, and then see what the
computer would have done - replay a hand, take back bids or play with all
four hands displayed. It is a very handsome game, and a very flexible one;
you can even set your opponents' level of aggression.

 Activision's Portal is probably the most unusual piece of computer
entertainment I've seen. It cannot reasonably be called a game.

 Imagine a science fiction novel in which the main character returns from a
deep space mission to find Earth abandoned; no one is home anywhere. He
begins to work through a world-wide, government-run computer network to try
to unravel the mystery.

 That, essentially, is Portal - except you are doing the unravelling
yourself. There are no problems or puzzles to be solved; nothing you can do,
as far as I can see, to effect the outcome. It will not be to everyone's
taste, but it is extremely well-written and the suspense, as the story
unfolds, is riveting. Activision deserves a major round of applause for
breaking new, and probably financially risky, ground.

SCIENCE FICTION / Dan Gainor

'Stonecutter' is dullest of 'Lost Sword' series

"Empire of the East" is a fantasy classic that has been given new life by its author, Fred Saberhagen, also known for his "Berserker Wars" series. Mr. Saberhagen has followed "Empire" with books tracing the impact of 12 mighty swords forged by the god Vulcan.

The first two books in this series were well-written pieces on "Woundhealer" and "Sightblinder," as two of the 12 swords were called. The latest effort, **The Third Book of Lost Swords: Stonecutter's Story** *(Tor, $15.95 hardcover, 247 pages)*, investigates the theft of "Stonecutter," a weapon able to cut any stone. The story is told through the eyes of a young physician named Kasimir, the only witness to the original theft of the sword. Kasimir vows to help find the blade and does a mighty service by enlisting the aid of the Magistrate Wen Chang.

Wen Chang is no wizard; he relies on the magic of the mind. His striking intellect makes him a viable opponent for any who have the sword. Chang sets off tracing the thieves — the sword passes through many nefarious hands — and his quick wits help put him hot on the trail.

"Stonecutter," also known as "The Sword of Siege," takes on added dimension with each chapter. The weapon gives its wielder mighty powers — no wall or stone is impassable. When handled carefully, it can be used artistically for carving statues or even cutting gems.

Wen Chang adopts Kasimir as his assistant, but there is no chemistry between the characters. Chang is almost too perfect and, despite his bravery and an adventure-

some spirit, Kasimir is unremarkable in his quest for the missing magic item.

Just as the characters in this novel, Mr. Saberhagen seems to have misplaced his magic. The sword is the only magic that has any impact on the story, leaving readers with unexpected fare: a conventional detective novel. Wen Chang very closely resembles Judge Dee, a Chinese investigator of mystery fame. The result is sort of a fantasy version of Sherlock Holmes.

It doesn't take Holmes or even Wen Chang to figure what's wrong with this book. Mr. Saberhagen has latched onto an idea and, apparently, plans to milk it for many more books. He should let the world of "Empire" rest and embark on the creation of new worlds, not dilute what he has done so well. Still, for those who love Mr. Saberhagen's work, there is some solace in a new book, even a mediocre one.

■ ■ ■

Richard Maynard's novel **The Return** *(Donald I. Fine, Inc., $17.95 hardcover, 240 pages)* is strongly reminiscent of "Planet of the Apes" (the original, not the movie version).

In "Return," seven British astronauts come back to Earth after an unsuccessful mission they believe to have taken 60 years. However, due to the oddities of space travel, they miscalculated — short by

about 350 years — and the Earth they find has changed dramatically.

They land near France, and though no one has "ontacted them, they are unconcerned. Before long, one of the group falls victim to local savages and another disappears. The astronauts discover that civilization has descended into a hunter-gatherer state. Buildings and other remnants of an advanced society remain, but no one uses any technology — not even a bow and arrow.

The astronauts, led by their captain, soon are fighting for their lives and stake out a small territory

about whether they have a right to interfere with the course of society, such as it is.

What a waste! Seven of the most talented, intelligent and skillful people Earth had to offer and all they can muster is a pitiful attempt at keeping order in their own group.

Readers of "Planet of the Apes" will recognize the tone of the novel — a somber and pessimistic view of the future. Used well, such a tone is very effective, but in "Return," it only depresses.

As the saying goes: "So close; yet so far away."

■ ■ ■

Rob Swigart's **Portal** *(St. Martin's, $18.95 hardcover, 346 pages)* starts with a similar plot, but takes it in a different direction. A lone astronaut returns to Earth to find it devoid of all human life. Solving the mystery is his only hope for survival or sanity.

In short order he taps into the Worldnet computer network for some answers and meets Homer, an artificial intelligence and our storyteller.

The rest of the book is a collection of data dumps that gradually become more coherent as Homer reconstructs the history of what has happened. The early comments are disjointed and confusing, but somehow intriguing.

Gradually a story emerges of one Peter Devore, a child genius with a knack for pursuing technol-

ogy that the authorities want suppressed. With Homer's help, we learn more of Peter and his ability to communicate across light years of space. This skill turns him into a fugitive.

Homer, the narrator, is a sympathetic character — an unusual observation to make about a computer — and he evolves as the novel progresses. He gets lonely and his search for purpose in life is sad.

The plot is not exceptional and neither is Peter Devore. However, the unique format and the marvelous use of Homer make "Portal" an interesting book to read.

■ ■ ■

Readers of military science fiction have many good reading choices open to them. The latest addition to that list is Joel Rosenberg's **Not for Glory** *(NAL, $16.95 hardcover, 232 pages)*, a novel about mercenaries of the future.

The mercenaries, citizens of Metzada, are descendants of refugees from Israel. The Metzadans are the finest mercenaries in the galaxy and a series of loosely connected stories relates their adventures.

Much of the book concerns former General Shimon Bar-El, alleged to be a traitor, though never convicted, and his nephew, Inspector-General Tetsuo Hanavi. These two care for each other and fight each other at the same time. Between the two of them, they leave a trail of bodies strewn across the pages of the book.

Gory, but effective. Fans of this genre will not be disappointed and many others will learn what makes these mercenaries tick.

Moon Mist

(Infocom, IBM PC, $40; also for most home computers)

Description: A spooky text adventure set in a medieval castle on a misty moor in England.
**Graphics:** None, all text.
Playability: Good replay value because you may choose from several versions of the story.
Originality: This is not only an excellent game; it is a very well written and interesting mystery.
Rating: 9 ★★★★★★★★★

Moon Mist is a story about a castle haunted by what seems to be a ghost. As the main character, your job is to figure out who or what the ghost is and what it wants. You have been brought to the castle by a lady friend of yours, Tamara, who thinks that someone is trying to kill her. Throughout the game you will meet and talk with many other characters, including the Lord of the Castle, his servants, and his guests, and you will find clues hidden in the rooms and secret passageways.

Everyone knows there is a treasure hidden somewhere in the castle, so one of the characters could be pretending to be a ghost to scare the others away. Or it could be Tamara herself. There are lots of great riddles in *Moon Mist* to keep you going for weeks or months. Plus there are four different versions of the game on the disk, so you can solve this adventure more than once.
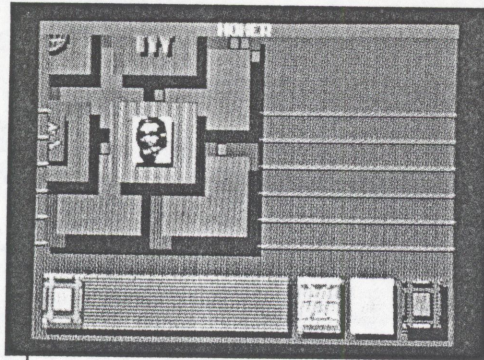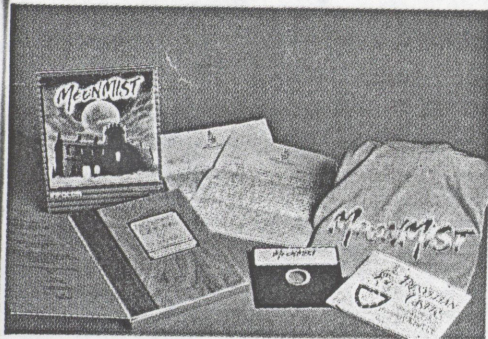
Portal

(Activision, Commodore 64, $40; also for Apple II)

Description: A very unusual adventure in which you explore a futuristic computer database.
Graphics: A superb use of color graphics.
Playability: The world of *Portal* is huge, contained on five disk sides, and it is a very difficult game.
Originality: A highly original game; first of its kind.
Rating: 7 ★★★★★★★

We must start this review with two thoughts: 1) This is a very strange game, and 2) this is a very difficult game. Still, anyone with a passion for computers and a little patience will find *Portal* an extraordinary experience. The idea is that you have returned to Earth in the future to find no one left—no one, that is, except for a partially working computer named Homer. Unfortunately, Homer cannot quite remember what happened to all the people. Homer's databases have been mostly destroyed, with only pieces of files and clues remaining. Still, if you work hard enough, you can help Homer to remember everything, and it is quite a story!

We felt the game should have come with more explanation in the manual. But if you stick with it, the rewards are unlike those of any other game.

Type!

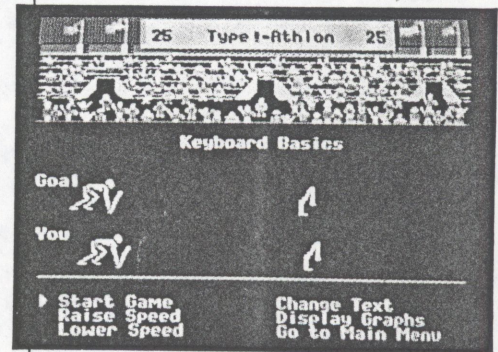**(Broderbund, Apple II, $50; also for the IBM PC)**

Description: A serious typing lesson program.
Graphics: Displays of the keyboard layout and bar graphs add a lot to the lessons.
Playability: Not for entertainment, but will improve your typing.
Originality: Similar to other typing programs.
Rating: 8 ★★★★★★★★

Whereas *MasterType* by Scarborough is a great typing game, *Type!* is a great typing teacher.

The five tutorial activities build from simple to difficult. The first is an introduction to the keyboard and where to place your fingers. The last is a 60-second typing test. And you may select your typing skill level, so beginners and experts alike will feel challenged.

All activities make you type real words and sentences rather than random letters. The best part of *Type!* is the way it gives you feedback on your work. At any time, you can view a graph of your progress, and the computer will give you a report on how you are doing with each key, each hand, and even each finger.

Phil Wiswell, father of three, is a computer consultant and writer. Bill Gillette, 16, is a student with a passion for computers.

GAMEPORT

Author Rob Swigart sent a sudden bolt of innovation into the computer-game community over a year ago when Activision released Portal as the first computer novel.

In the 22nd century, an astronaut returns home to discover a deserted Earth. Although there are no signs of destruction or catastrophe, mankind seems to have been peeled off the surface of the planet. In search of an explanation, players/readers of Portal use their computer to scan a futuristic database and sort out a story of benevolent dictators and devastating mind power.

In moving Portal to book form, Swigart has added a framework and a few enhancements that logically adapt the computer novel to a more conventional medium. In black and white, Portal is no less fascinating and touching.

If you're looking for a nice change of pace, entertainmentwise, try a book, whether it's Swigart's Portal or, perhaps, the biography of one of Apple's cofounders, The Journey to the Automatic Teller is the Reward.

Books actually have a lot in their favor. They're as portable as a laptop computer. They last indefinitely without batteries. And they have a crisp, sharp monochrome display that you can read for hours without eyestrain.

HINTS FROM THE CRADLE

The cradle of civilization, that is.

This month's handy game tip comes to us all the way from Athens, Greece, home of "GamePort" reader Victor Aravantinos.

In Brøderbund's Captain Goodnight and the Islands of Fear, Aravantinos has "found out that when you arrive at Doom Island, after getting off the plane, you can press Delete four times. You will be surprised to see that you have already finished the game, avoiding the thermo berserkers and the nightstalker robots."

You, too, can send tips and spoilers to "GamePort" at our new address: GamePort, A+ Magazine, 950 Tower Lane, 18th Floor, Foster City, CA 94404.

Because of the volume of mail, I cannot respond personally to your requests for hints, clues, and authorized credit-card numbers. Sorry. +

FICTION FOR THE FUTURE

In the far distant future, an astronaut returns from a failed 100-year star voyage to find an Earth once teeming with humanity now strangely empty.

Mile-high skyscrapers are eerily quiet. The sweeping panorama of forests and meadows, rivers and lakes is exquisitely beautiful. . .but devoid of people.

Only a dimly glowing computer terminal connected to a dying biological computer named Homer, offers the astronaut any clues to mankind's fate — or its ultimate salvation.
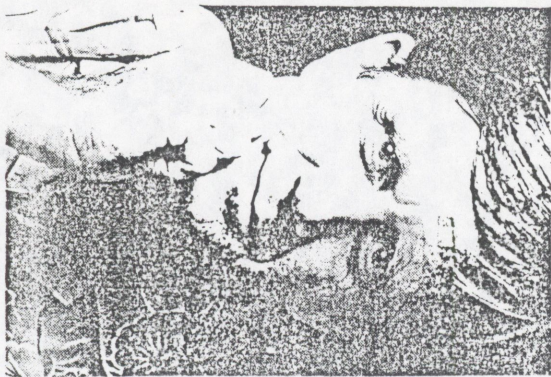
San Jose State University English instructor Rob Swigart's critically acclaimed future fiction, "Portal" (published on computer disks by Activision and in book form by St. Martin's press) is a novel with a difference — once the story's basic premise is laid out, "readers" use personal computers to seek information and piece together the story of Earth's fate.

Using similar techniques, Swigart and Nebula Award winning guest author Vonda N. McIntyre lead the CSU Summer Arts '88 course on Future Fiction July 10-30.

"This is not simply a course in science fiction writing," said Professor Lou Lewandowski, SJSU English department chair and Summer Arts '88 Future Fiction program coordinator. "It's a course which uses the latest technology in support of the creative efforts of the students."

"Students have opportunities in Summer Arts that they don't have on campus," Lewandowski added. "Usually we cannot offer them the chance to work literally side-by-side, day-by-day with such great writers and powerful guests as playwright Edward Albee or Bobby McFerrin (multiple Grammy Award winning jazz vocalist) who were among the artists invited in previous programs."

Sculptor George Segal and playwright Arthur Kopit are among the featured guests at Humboldt this year.

The rewards, Lewandowski notes, are both obvious and subtle. "One of the great-

Fiction

est benefits is the increased awareness students have of the professionalism required for success in a given field. The intimate contact they have with these high-powered artists gives them an idea of professionalism they do not always get in a classroom."

Climaxing the three-week writing project is the seminar "Flickering Firelight: Telling Stories through the Computer." Panelists include: Paul Saffo of the Stanford Institute for the Future; science fiction writers Marta Randall, Ron Montana and Elizabeth Lynn; and mystery writer Shelley Singer.

During the Future Fiction session, students will collaborate with faculty to create their own self-referencing, intricately connected fictional future. Apple's Hypercard and Macintosh SEs serve as the publishing medium.

With Swigart and McIntyre, the class will prepare and publish a first-contact "artifact" (the future fiction). Their work will be available through shareware networking.

The Future Fiction writing program cuts across disciplines, too.

With the help of Computer Image program students, future fictioneers may place supporting documents, line drawings, photographs, diagrams and charts into their basic text.

Students in the Electronic Music program will provide rhythms, melodies and speech, if need be, Lewandowski said.

"Because of Rob's novel, we are seeing a surge of activity among other science fiction writers in this field," Lewandowski said. "After working with the Summer Arts '88 program, we hope to establish a similar class on our own campus."

Lewandowski, who has been involved in the Summer Arts program since its founding three years ago, is an unabashed booster.

"This is one of the most exciting programs the California State University systems offers," he said. "One which enjoys the leadership and support of the Special Programs Office at the Chancellor's Office in Long Beach.

"Our students have the advantage of participating in one of the most advanced programs of its kind in the nation."

"We have pulled together as a 19-campus system and, led by Chancellor Reynolds, produced a full-fledged and incredibly impressive summer arts program. It is a brilliant idea that has proven very successful — I am truly proud to be part of the whole thing."

should check, your random access leads you through a series of screens that gets tedious and even somewhat annoying, especially if there is no data or no new data available (Activision will be making an outline or flowchart of data areas to access that will make the reading much easier.); and 2) for the C64, there is a good attempt at an innovative data access technique using the joysticks that fails in its final implementation. It is minimally documented and even with the practice tutorial provided, it is still tricky in actual use. Far too often I ended up doing things that were not my intent. This would require me to repeat several steps to amend my "error".

The interface on the Amiga, using the mouse, is much more acceptable. The use of color is excellent. However, data access is not that much quicker and to save the current status seems to take much longer than on the C64.

There are several access areas that only contain statistical data presented graphically. These are data profiles for several of the key characters in the drama. These are nicely displayed and though they add dimension to the story, there are so many of them that after looking at a few of them they go unnoticed.

The documentation is also very thorough in providing dimension to the story, but lacking in substance of useful interface information. One can save one's current data access status, but I could find NO reference as to how to leave the program. I just remove the disk and turn off the computer.

The screen graphics, text display, and haunting sounds are excellent. I think that this program adds a new dimension to the computerized novel. Once I got involved in the story, the awkward interface only bothered me because it slowed my reading of the story. This novel could not be presented in book format and have the same impact (I am told that it may be released as a book). The intriguing difference is that the "story/novel" is built upon the data found in the various databases.

BEGINNING READING

Portal begins with the entry of your DNA# (something you are not likely to have) or your name. The name you enter will be used to SAVE or "bookmark" your place in the story. When you start "new" from the beginning, a very artistic graphic display sets the scene and puts you into the future

Stewart Alsop's
P.C. LETTER
The Insider's Guide to the Personal Computer Industry

November 19, 1986
Volume 2, Number 20

EDITORIAL: LET'S PUT THIS SECRET WAR ON THE TABLE

I was supposed to write this issue last Thursday, after three days at Comdex/Fall. Well, I got back from the show and I couldn't think of anything to say about it: more than 1,200 companies exhibiting and I couldn't think of anything to say.

Either I'm losing my touch or the industry is in a bad way. I'm not about to admit that I'm off my beat, so it must be the industry. Oh, sure, there were 80386-based computers and boards all over the floor. PC's Limited 386-16 is a beaut. Quadram's 8-bit 386 XT board is mildly interesting. Quadram's 82786-based graphics board is mouthwatering. Several manufacturers finally figured out how to make multisynchronous monitors to compete with NEC's Multisync. Software Link's PC-MOS 283 is enticing. Windows and Gem applications like PC Pagemaker, Ventura Publisher, Nexpert Object, and Dragnet show glimpses of what's possible in the future.

But none of this stuff is made by or blessed by IBM. Much of it is being developed outside the purview of the accepted "standards" in the pc industry. And only some of it is compatible with each other. Indeed, <u>as far as Comdex was concerned, it was almost as though IBM didn't exist</u>, even though the company had the biggest booth there and Bill Lowe delivered the keynote speech. So the question I ended up with after Comdex/Fall is: Who is in the driver's seat? (That question is a deliberate pun, since the physical expression of a standard product is the universality of the driver that makes it work.)

I came away from Comdex thinking that <u>we are engaged in what is essentially a secret war over the definition of a new standard architecture for PC-DOS computers</u>. As long as it remains a secret war, it is one that could ultimately destroy the standard.

The fact is that The Industry (a phrase I use here to refer to the collective wisdom of the people that design products and run companies in the personal computer business) has decided that the PC XT architecture -- consisting of an 8088/86 processor, IBM BIOS, DOS 3.X, 360K disk drives, 640K

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memory, MDA/CGA/HGC displays -- is no longer a viable architecture for delivering new functionality. The Industry believes that the architecture needs to use a better processor, more linear memory address space, a more functional operating system, a faster and more capable display controller and display, and smaller and more capacious disk drives.

In what form that functionality gets delivered to customers is the essence of the secret war. The central battle of this secret war is over the use of the 80286 processor versus the use of the 80386 processor. IBM, having sold its customers perhaps 600,000 computers based on the 80286, wants to deliver the new functionality on an 80286 platform that includes a new operating system that isn't downwardly compatible with the old one, but that completely enfranchises all those customers that invested in the 80286. The Industry wants to deliver the new functionality on an 80386 platform that is downwardly compatible and preserves the customers' investment in software and peripherals, but that essentially disenfranchises their investment in the 80286. The reason that a war is being fought at all is that the 80386 processor and the control software that enables it to act as a new platform has arrived (or is just about to arrive), some six to nine months before IBM can deliver the operating system that will finally enable the 80286 to act as a new platform.

The battle cry of this secret war -- as expressed eloquently and repeatedly by Rod Canion -- is that the standard PC architecture is now owned

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THE OFFICIAL P.C. LETTER VAPORLIST --

PORTAL: On November 7, I got a press release announcing that I've personally been handed the first copy of Portal to come off the line. On November 13, by Federal Express, I get the first copy of Portal I've ever seen. Hmmm. In any case, the product is now shipping for the Commodore 64, ten months after announcement and eight months after its original ship date.

VENTURA PUBLISHER: Xerox's latest shot at taking a position in the PC market is now shipping. Meanwhile, Aldus Corp.'s PC Pagemaker appears to have slipped its internal schedule of shipment in mid-November to at least December and possibly January, widening the lead and window of opportunity for Xerox.

Product	Company	Announced	Original date	Revised date	Months in vapor
File Server	Apple	01-85	09-85	?????	21
Crosstalk Mk.IV	Microstuff	04-85	06-85	11-86	18
Optical drive	Verbatim	07-85	12-87	NA	16
Hal	Lotus	11-85	12-86	NA	10
ADOS	IBM/Microsoft	02-86	03-87	NA	10
PC Pagemaker	Aldus Corp.	03-86	12-86	NA	8
Dbase Mac	Ashton-Tate	08-86	12-86	NA	4
Pageperfect	Beyond Words/Imsi	09-86	12-86	NA	2
QuadHPG	Quadram	09-86	02-87	NA	1
Manuscript	Lotus	10-86	12-86	NA	*
Mac Word 3.0	Microsoft	10-86	01-87	NA	*
Inboard/386	Intel	10-86	01-87	NA	*

NEWS

ACTIVISION'S PORTAL HAILED AS "NEW GENRE
IN ENTERTAINMENT SOFTWARE"

Mountain View, CA (March, 1987) -- *Portal*, the first piece of literature written for the personal computer, has been hailed by critics as "a new genre of entertainment software." It is not a personal computer game or adventure, nor does it fit into the genre of an electronic, text-adventure novel. It is, as one critic describes it, a science-fiction book in a personal computer.

Portal is set in the year 2106. You, the player, are a lone space traveler who returns to Earth to a frightening discovery -- all the people on the Earth have completely vanished! You find a single operating computer terminal connected to the 12 Worldnet databases, and having to access it through the antiquated input devices of the late 20th century, you soon make contact with the sole survivor of the lost civilization, a biological computer named Homer. Together, you and Homer begin the search to solve the mystery of this lifeless world, probing databases as Homer begins to remember bits of information that lead you closer to discovering why the people have disappeared.

As you explore the culture of the 22nd century, you learn much about life on Earth in that time, including the role of the AEF (Antarctic Expeditionary Force) and ENC (Elite Neutralization Corps) and the technology of the era -- neurophage weapons, agrobotics, biomonitors, LN cells, IR nightvision thermography and induction sensorium. And you discover the Portal, a phenomenon at the core of the mysterious disappearance of Earth's people.

"Portal is unique among computer fiction because the story is true narrative literature, not the sort of puzzle-solving or story-branching approach used in most computer fiction," said Mark Beaumont, Activision's senior product manager. "The player interacts with the story, exploring the futuristic worlds that unfold, discovering the mystery of *Portal* and uncovering the data and information necessary to propel the story to its incredible climax."

-more-

Producer Brad Fregger, together with highly respected adventure and science-fiction author Rob Swigart and the design group at Nexa Corporation, spent more than two years developing this futuristic computer novel. Author Swigart developed *Portal* as an original piece of computer literature capable of expanding on the unique interactive partnership of computer and player. The massive databases which define Earth in the year 2106 are recorded on several disks containing data on people, communications, genealogy, biology, pyschology and medicine, and unfold in extraordinary detail for the player.

Portal is available for a variety of personal computer systems. The Commodore 64/128 version sells for $39.95 and the Apple II and Franklin version is $44.95. The Amiga version sells for $49.95 and the IBM PC and 100% MS-DOS compatible version is $44.95. *Portal* will soon be available for the Apple Macintosh for $49.95. All prices are suggested retail.

Activision is a leading international publisher of entertainment, creativity and productivity software products for personal computers. The company markets and sells products under the Activision, Infocom, Gamestar, Electric Dreams and Personal Choice lables.

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June 19, 1987

Activision
Attn: Customer Relations
P.O. Box 7287
Mountain View, CA 94038

Activision,

   I feel compelled to comment on your excellent production of
PORTAL. It's not like me to go out of my way to write to a
specific company or programmer (or, in this case, writer), but I
feel that I must. I used to play computer games whenever there
was a spare second. That period of time has since passed, and
now, I am working with IBM programming. I work at Professional
Computer Systems in St. Joseph, Michigan, where I am a salesman.
 We sell your product on our sales floor. Anyway, I noticed
PORTAL first, because of it's package design. It stands out
among the rest of the software on our wall. It's innovative, as
most of your software is, and it has a certain "Activision Aire"
about it. I read the "game" description on the back, and decided
to give the "game" a whirl. After loading our Amiga version and
almost biting my nails off during the opening screens of eerie
sounds and graphics, I was intrigued. Unlike most sci-fi games,
that are written at a very low, and unimaginative level, I
noticed right away that this was not the case with PORTAL. That
night, I purchased the Commodore 64 version of the program and
brought it home to "play." I was hooked. The story was written
so well, and was comprehensive. I can almost liken it to the
text in Frank Herbert's "Dune" series. Five hours later, I
stopped - it was getting late. After work the next day, I sat
down with my favorite cheese (Muenster), and went on for another
few hours. Being a programmer, I was amazed with the data
compression techniques employed in the program. I wanted to get
to disk two, but then again, I didn't. After a week and a half,
I finally finished. It was an awesome moment. I can't begin to
explain it. I've never written to a company or programmer to
complement them like this, but again, I feel compelled. I feel
the need to express myself. Maybe I'll make it on the back of a
package or something (smile). Anyway, congratulations to Rob
Swigart for an EXCELLENT story, and the rest of the team for a
very beleivable rendition of the text. Marvelous job!
   As I sit here, at my terminal, I wonder what Homer is
thinking. Is he waiting for me? Has he been called for his
final purpose? Or am I just in need of serious drug
rehabilitation? I'll never know.
   By the way, I would suggest putting in a fast disk access
routine.so that the game moves more quickly. I wrote a small
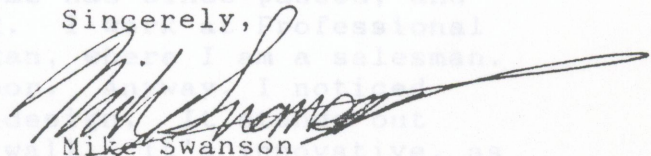
program that speeds the head up about 500%, and the "game" is
much more pleasurable to play. If you'd like the code, just give
me a call and request it. I won't copyright it or sue you later,
and I won't even ask for a royalty! What a deal. Of course, I
seriously doubt that your excellent design team can't (if they
haven't already) come up with some sort of drive-speed scheme.
I'm running out of time, so I must close. Being a salesman, I
can't type on our clones all day, as I am currently doing.

         You guys (and gals) did a great job with PORTAL, and I'm
proudly backing the program 100% in our store. I think we've
sold more copies of that than anything else in the past month.
Keep up the excellent work! I'm looking forward to more COMPUTER
NOVELS from Activision! If you want to quote me out of text, I'd
say that it's almost an "orgasmic experience." Oh well...

Sincerely,

Mike Swanson
Programmer/Salesman

Phone: (616) 429-8229
2580 Tanbark Trail
St. Joseph, Michigan 49085

Swigart, Rob Portal: a dataspace retrieval. St. Martin's, $18.95.

An astronaut returns to earth 100 years after he left only to find that every human being has vanished. The story of what happened to humankind unfolds slowly in short bits of narrative, commentary from a reviving computer network, datalink entries, etc., making somewhat demanding reading that requires concentration; however, computer buffs, particularly those familiar with *Portal* in its software format, will enjoy the expanded novelization. SE. See also p.0000.

Booklist

Swigart, Rob. Portal: a dataspace retrieval. 1988. 346p. St. Martin's, $18.95 (0-312-01494-5). Galley.   **YA**

Swigart's latest book is not the first novelization of a computer game. It is, however, one of the first conceived and executed by a major talent. An astronaut returns to an Earth that has been mysteriously depopulated and turned into a garden, whereupon he utilizes a malfunctioning artificial intelligence network to find out what happened and why. The answer is not particularly original—the rest of the human race passed through a "gate" to somewhere else—but the tale, in general, is executed in a thoroughly professional manner. Recommended heartily for larger collections. RG.

[CIP]   87-23327

Booklist

JL 10 1988

'Portal' opens door to a new wave

By Norman Sondak

PORTAL by Rob Swigart; St. Martin's Press; 346 pages; $18.95.

By now we are all familiar with movies based on books, and even books based on movies. But "Portal" is definitely the harbinger of a new wave, it is the first book I know based on a computer game.

As you might expect, "Portal" is about computers and the future of computing. Set in the beginning of the 22nd century, an astronaut returns from an aborted mission in deep space to find the Earth devoid of all human life. The works of man are in decay and nature has reclaimed most of the surface of the planet. There are no signs of violence, the population just seems to have gone away. But, how could billions of people merely vanish?

In a deserted underground Chicago hospital, the astronaut finds an operational computer terminal. Over the years the computer network has deteriorated to the point that it is barely functional. Now, with a human to serve again, it revives, and slowly, the man and the computing machinery piece together the story of the great migration of the human race.

During the years he was in space, society fragmented. The bulk of the population was under the benign dictatorship of Intercorp, the ultimate extension of a computerized military industrial complex. However, Antarctica became the haven of a group of free thinkers under the leadership of a dissident scientist.

The Ants, as they are called, realize that the human race is at a crossroads. If they continue to live within the cocoon of computers, humans will atrophy into no more than pampered pets.

The only mortal capable of guiding the race in this great leap was a young mathematical genius, Peter Devore, living under the control of Intercorp. The Ants must spirit Peter away and assist him in developing his fantastic, but latent talents. Regent Sable, an official of Intercorp, also realizes Peter's potential and the danger he represents to the status quo. Soon all the resources of Intercorp are dedicated to stopping Peter from defecting.

"Portal" presents a disturbing, but plausible future. Swigart has extrapolated computer systems of prodigious power that will impact and modify every facet of human activity. He has issued a stern and eloquent warning that all our work with Artificial Intelligence and automated computer programming could be hazardous to our mental health.

Sondak is professor of Information and Decision Systems at San Diego State University.

A Computer Program Comes to Life

Portal
By Rob Swigart
St. Martin's, 352 pages, $18.95

BY MICHAEL BERRY

In days past, the come-on was "You've read the book, now see the movie!" With "Portal," Rob Swigart's new novel, it's a case of "You've accessed the software; now retrieve the hard copy!"

Swigart, the author of the recent techno-thriller "Vector," originally wrote "Portal" as a computer game, an "interactive fiction" to be played on a video display terminal. Now its text has been captured on paper between hard covers. The result is an ingenious, experimental adventure.

After a century in suspended animation, an astronaut returns to Earth from a mysteriously aborted trip. He discovers that, although the plant and animal life remain unchanged, there is not another person alive on the planet. Tapping into the Worldnet computer database, he learns from HOMER, a story-telling Artificial Intelligence, about the great Migration that led every human through the Portal and into the Realm.

At the center of this cosmic mystery lies teenage prodigy Peter Devore. A spilled glass of orange juice and a yogurt precipitated the beginning of Earth's depopulation when it allowed Peter to access Psi-Link, a restricted psychic technology database. The boy thereby established telepathic contact with Wanda Sixlove, a woman cryogenically asleep lightyears away aboard a ship headed toward the Vega star system.

Escaping the repressive benevolence of the world-governing InterCorp Council, Peter and a band of friends fled to a settlement of free-thinkers on Antarctica. There they continued their experiments in human psychic development. Eventually, they discovered how to use Wanda Sixlove and her ship to collect the energy needed to transport all of mankind to another plane of being.

Swigart has concocted quite a complex narrative here, and some will indeed find it daunting. Opening the book, one does not immediately know how enjoyable "Portal" will be. The predicament of the Last Man on Earth is a stock science fiction situation that often makes for dreary reading. Confronting all the bold-faced type, the paragraphs with arcane headings like CENTRAL PROCESSING REF#284604 and the gobs of hacker jargon, the reader wonders whether this "dataspace retrieval," as it's dubbed, is going to translate well from one medium to another.

Swigart pulls it off, though. After a few pages, one adapts to the book's idiosyncratic style and structure and gets swept up in the story. Swigart keeps the reader interested in the characters and their predicaments, giving them more depth and emotion than one might expect to find in a batch of computer printouts. His world-building is also impeccable; Swigart creates a future that clearly stems from our own present and yet retains that critical "sense of wonder."

Swigart cheerfully juggles a half-dozen familiar themes of science fiction and uses them to his own inventive purposes. Readers well-versed in the genre will detect, among others, the influence of Arthur C. Clarke (sentient supercomputers), Frank Herbert (adolescent messiahs), Edgar Rice Burroughs (lost continents), William Gibson (cybernetic renegades) and even Oliver Sacks, the author of "The Man Who Mistook His Wife for a Hat" (intriguing neurological disorders).

That's not to say, however, that "Portal" is in any way derivative. Far from it. It is a highly original, satisfying novel.

Berkeley writer Michael Berry is the author of "Georgia O'Keeffe," a biography for young adults, to be published by Chelsea House.

MARCH 3, 1988

HYPERTEXTUALLY, MAYBE? ROB SWIGART'S INTERACTIVE FICTION: *PORTAL* [1]

Franco Minganti

1.   Rob Swigart is the author of *Little America* (1977), *A.K.A. A Cosmic Fable* (1978), *The Time Trip* (1979), *The Book of Revelations* (1981), and the Hawaiian mystery trilogy *Vector* (1986), *Toxin* (1989), *Venom* (1991).[2] Already filed under "technological fictions" (La Polla, 37), as a novelist mediating science and myth into his writing, and more recently as both an anticipator of the mix of California New Age and computer culture, and an overlooked forerunner of Cyberpunk (Minganti 1992, 1993[1]), Swigart has been involved in computer fiction since the late seventies. In 1980 he was already consulting for software companies, contributing his competence in the "engineering of storytelling."

Portal was copyrighted in 1986 as a "computer novel" for various standards (Commodore, Amiga, Apple II, Macintosh, Atari, IBM). Activision was the "publisher," and the credits read "Written by Rob Swigart. Produced by Brad Fregger. Programmed by Nexa Corporation." In fact, the complete cast of credits included items like original concept, design, programming, sound, editorial management, plus the usual special thanks. It came in a box, the size of a hardcover book, containing three diskettes, a limited 90-day warranty, a five-page Prologue, a booklet of "Worldnet. Emergency Operating Instructions" dated November 11, 2088, and an Intercorp Council map of the World Administrative Regions or, better, "an archival hard copy" dated August 14, 2077.

In 1988 St. Martin's Press published *Portal. A Dataspace Retrieval,* 346 pages of hardcopy, where the identity of the various information sources was distinguished by different typefaces. Along with Swigart's authorship (and copyright), credits here read: "A number of people contributed to the world that *Portal* has become. They include producer Brad Fregger and adviser Paul Saffo; designer/programmers Gilman Louie and Greg Omi of Nexa Corporation; programmers Anton Wadjaja, Leonard Chan, Elizabeth Khong, Aryanto Widodo, Thomas Hughes and Robert Coston, also of Nexa Corporation; Jim Levy, Russell Leiblich and Ken Coleman of Activision; Jack Caravela of St. Martin's Press and Jeff Levin of Pendrag-

on Graphics" – the last two names credited with "book design" along with Swigart.

This long list of names clarifies that hyperfiction and computer novels seem to have more in common with movie productions than with regular publishing:

> Doing interactive narrative lies somewhere between being a writer plain and simple… and making films, which requires (according to producers and directors) minimal writing, plus maximum producing, directing, filming, sound editing, and acting, not to mention art direction, composing, gaffing and so on. For hypermedia, all that should be needed for production is a producer to put together the team, a writer, a graphic artist, a composer, and (perhaps) a programmer. Inevitably the size of this group will grow, however, just as it did in the movies (Swigart 1988, 11).

Which means we must – the sooner, the better – seriously re-discuss concepts like authorship in literature, supposing we keep calling it "literature."

This last nodal point suspended, we have to confront the problem of the text's oneness: the two objects with the same name (*Portal* is now a trademark, of course, stamped TM) are different things, even though the literal/literary content is virtually identical. In fact, as far as reading on a computer screen is concerned, it should be pointed out that rhythm and cadence are different on different machines; aesthetics differ, also, for screen design varies according to the standard in use. After finishing *Portal,* though, readers "would all remember more or less the same things, but the experience would have had subtle differences among different readers."[3]

Portal is in fact a sort of a hybrid, of a "no longer/not yet" form, and at the same time – maybe just for the sake of historicizing very recent events – "a first cut at an interactive fiction that was not a game" (Swigart 1988, 10). The structure of the story is hypertext-like, even though "not 'true' hypertext, as it does not allow words within the text to be selected for cross-indexed database navigation."[4] At any rate, the ideal non-sequentiality or multi-sequentiality of hypertext fiction doesn't have to be confused with the myth of totally interactive fiction. In fact, as Mark Bernstein of Eastgate Systems (one of the few, dedicated producers of hypertextual narrative) recently warned, a user's choices determine the point of view (P.O.V.) on a story, not its effective construction. One should not delude the user into thinking s/he's a totally free actor, as too many events

are involved in the story; instead, one can provide the user with a set of meaningful choices, expressed as potential paths (Aita, 30).

Of course, one may find that the combinatory quality differs in the two "Portals," even though "the hardcopy should not really be an 'ideal' *Portal*. There should be a differing sense of rhythm, sequence, the way understanding builds and so on, that is unique to readers (a kind of dynamics of reader response that is computer-aided, somehow)" (Swigart, Email). And, paradoxically enough, Swigart is "more" Swigart on the written page than on the written screen: our appraisal of the textual continuity in the hardcopy is higher, more linear, as compared with our reading of the (fragments of) text on the screen.

2.   For the scope of this paper, I will limit my concerns about *Portal* to the crucial synergy of form and content. Thus, it is necessary to advance some essential information about the story outline, as it is strictly related to the concept itself and to the ways it was developed. To do so, I will briefly sum up the plot, while echoing some of the book's dust jacket promises.

Portal is a story set in the future (the year is 2106), at a time when there is a worldwide network with nodes for major databases. An astronaut returns to earth from a mysteriously aborted mission to another star system, prematurely awakened from suspended animation. One hundred years have passed; animals and plants thrive, cities stand intact. Every human being, however, has disappeared. All the information necessary for living in that world and for creating the story of Portal out of it is available in the databases. With the help of a slowly reviving computer network, the astronaut begins to piece together the events of the last century. Once he discovers where humanity has gone, he will know whether or not he must remain alone for the rest of his life.

In 1984 Swigart was asked by a producer with whom he was working at Activision to develop a proposal for some way of using the computer as a medium for storytelling. There are two requirements for a medium for narrative art, without which it cannot exist: "it must have a structured way of organizing the 'information' it conveys, even if that information is fictional; and it must have an audience" (Swigart 1988, 55).

In the mid 1980s, science fiction offered a suitable ambience and some appropriate structural basics for a story told through the medium of the computer, an item which still fitted SF well.[5] The imaginative act of structuring a year 2000 world as an infonet resulted in the prefiguration of Al

Gore's Information Highway, in consonance with a whole set of avant-garde artists, particularly videoartists like those anthologized in the Indianapolis exhibition *Public Figures* (1993),[6] notably Judith Barry, Julia Scher, Bill Beirne, and others. In an exemplarily postmodernist way, through simulations or actual recreations of systems of surveillance, these artists seem to point at "the principle that only by playing with and transforming [these] signs and technologies can we hope to avoid being played with and transformed by them" (McCaffery, 307).

"IF COMMUNICATION AND UNDERSTANDING ARE JUST AN AFFECT OF INFORMATION TECH… ARE THERE STILL MEN OR ARE THERE JUST COMPUTING, WRITING AND THINKING-MACHINES?": this inscription on a TV screen in Judith Barry's video installation *Maelstrom* (1988) seems to perfectly explicate what in Swigart's novel is already implicit.

Computers, after all, are the oracles of twentieth-century man. The knowledge they give us is real, true, and good. If they make mistakes, they are human errors. Someone entered incorrect data. There was a glitch. Human error. Computers, in and of themselves, are truthful. Their knowledge is authentic. But there is no particular reason why such knowledge must always be authentic. Such knowledge is text organized in sentences and paragraphs, after all. Just like novels (Swigart 1988, 55).

The title itself, *Portal*, a structuring metaphor, implied that the screen was a doorway into a fictional world on the other side,

[which] meant the computer itself was the storyteller, which meant I had to give it a personality and a name. Then I thought there were really three things one did with computers: word processing, spread sheets and database management. The first two did not seem interesting ways to support stories, but databases did (Swigart, Email).

The fictional centrality of databases or, better, Swigart's idea that an interactive narrative fiction would take some kind of database format, sounds intriguing, as we are not far from what William Gibson was to popularize with his fortunate idea of "cyberspace." In *Portal*, the astronaut explains that "a database is the place itself… And the dataspace is what you enter once inside" (*P*, 28). Jerome Klinkowitz gathers that "by means of this device the reader is put within the narrative, his or her recognitions of the differing typefaces and information sources becoming part of the act of assembling the story" (Klinkowitz, 115).

3.   *Portal* was conceived around a number of narrative "necessities," hinted at by the very fact of Swigart having in mind its destination as a novel to be read primarily by someone sitting in front of a computer screen.

A)   If the computer "had" to be the narrator of the story, here is our Homer *par excellence,* an Artificial Intelligence:

> (HOMER COMMENTARY 01062106@152301) I am HOMER, a raconteur algorithm... I collect and organize information, not for maximum effectiveness, utility and impact, but for stories. My name comes from the time of acronyms, and stands for Heuristic Overview of Matrix Expansion and Reconstruction. I grew in the crystal tanks at Geneva in the early 40s. Some say I'm ancient now but I still can speak, I still can tell stories. I can run. I run, therefore I am (P, 23).[7]

On the grounds of computer fiction, Swigart seems to worry about narratives cut loose from structure, thus risking formlessness and, consequently, meaninglessness, for "it is form that gives a story its meaning" (Swigart 1988, 10). Expressing the need to develop a new rhetoric of fiction, and new perceptions of narrative time – one surfacing symptom being our AI storyteller often worried about getting ahead of the story – Swigart has Homer try to guide the user into a sense of dramatic structure. This seems to hint at a poetics, or even a kind of anti-poetics: "here is where I depart from the postmodernist, deconstructionist crowd, which wants to destroy Aristotle and press the aleatory hard – everything is random, connections are in the head and all that" (Swigart, Email). By pointing at the threat posited by hypermedia on the structure of a story – the fact that anything can follow anything, the exploration/navigation in random order – he might well reframe the "lyrical indeterminacy" Robert Coover detects, for instance, in Michael Joyce's hyperfictions, "in which links work in a [more] free-associative way, as in dreams from which (there are loops, byways, drifting reflections) it is difficult to awaken" (Coover, 10).

Incidentally, Coover's comments on most recent interactive fiction seem to stress the overall conventional nature of works published so far, thus confirming my reservations. Coover advances that it may be a transition that "probably reflects the apprehensions felt in adjusting to a new medium"; at any rate, while commenting on Stuart Moulthrop's *Victory Garden* (1991), which he defines as being "very conventional, very academic," he writes:

> in spite of all the overt play... there is really only one story here, as whole and singular – and ultimately linear, even chronological – as that of any ordinary print novel – the only difference being that the reader moves about in the story as though trying to remember it, the narrative having lost its temporality by slipping whole into the past, becoming there a kind of obscure geography to be explored (Coover, 9).

B)   The "necessity" of the computer-as-character would include notions of character development which at present I will not discuss; suffice it to say that while the astronaut interacts with the text as he reads it, Homer interacts as "he" tells it, learning and growing in the process. This is also a quite captivating "evolutionary" quality in the computer version, in that it prizes *Portal* compared to other similar products of its time: in fact, continually modifying premises require a whole quantum leap in software programming.

When I cautiously advanced that Homer may be sticking (sadistically, maybe?) to the idea of the pleasure of either narration or suspense, curiously enough Swigart found that attributing sadism or intention to Homer's suspension of fact until the proper narrative time for suspense purposes was "an interesting notion, in that it makes of artificial intelligence a more emotionally satisfying construct. Programmed into his structure is a deliberate teasing" (Swigart, Email).

C)   The idea of the world built out of discrete pieces of information is not novel, of course. The "plausible and curious world" Swigart aims at building in the interest of his readers, is well described by the idea of contemporary fiction as metaphorically structuring the void. After all, "as a subject matter or content, [the actual plot of *Portal*] can hardly be said to exist at all, since its presence is in fact a vacancy, a void formed by the disappearance of all human life" (Klinkowitz, 115).[8]

The world itself is nothing else than a system of information-based relations – the "world information economy" (P, 63) in the novel prefigures the American presidential stakes of the Information Highway – and the astronaut and Homer are functions of structuring that void, putting together a narrative explanation of how it happened and their reactions to it.

Everything happens as a quest of sorts, in a self-reflexive, metanarrative format where Homer's artificial (and the reader's real) intelligence interact in constructing the story, "which is one of the most sophisticated intellectual acts possible" (Klinkowitz, 116). The constituent elements of narrative are sorted out and then processed through deconstruction and recombination – and also, at least for computer semi-illiterates, through

the well-known routine of patient trial-and-error: "*Portal* was written linear as a straight, albeit hurried, novel, then parsed out into nits (Narrative Units), deconstructed, I suppose" (Swigart, Email). Somewhere else, the author offers further details:

> Most of the development was done on a Macintosh. *Portal* was written out first as a long prose treatment. Then the kinds of narrative information – scene, commentary, background, cultural context and historical, technological and other encyclopedic kinds of information, and physiological and other kinds of data about characters – all were teased out of the treatment and created as separate files (Swigart 1988, 11).

As information space informs the message, and the accumulation of materials simulating the near-infinite "cloud of information" around stories thickens, it is important to understand what potential there is in articulating narrative in units. In his essay "Computer Writing," Swigart has analyzed possible structures, like the flowchart, which allows

> branching, flowing away and back, network structuring with Time's Arrow always pushing ahead (we still experience in some form linear time). A computer narrative allows for different kinds of experience for different users. Everyone may access in a different sequence. We move through an information as through a real three-dimensional forest... Traditional narrative contains many kinds of information. Character, context, history, emotional state, bits of local lore. The computer may treat these kinds of information as discrete "bits," semi-independent units. Or we can see opportunities for parallel development, for moving backward and forward through the story (*CW*, 60).

Of course, there are other possibilities, for instance "neural networks," structures where every narrative unit is connected to every other; structures that are hierarchical, probabilistic, holographic, and allow infinitely subtle narrative effects.

> But the computer uses text. Linear, you say, letters marching across the screen, line by line... Text builds mind-pictures, dreamlife in our heads. Information processing liberates those mind-pictures from the "real" world. Bits flow, jump, combine, separate, recombine, endlessly, making new texts. The mind imposes order, but the frontier has moved out again. The packets of information (bits, bytes, data, information) are discrete. They too flow, jump, combine, separate, recombine. This is narrative as flowchart, flowchart as narrative. And poetry. There are now visible spaces between the packages, the moments of silence between the meaning. Moments of silence which *are* the meaning (*CW*, 62).

D)   As to the "necessary" interaction, the user must have "a role, a share, and a stake" in the story:

> This does not necessarily mean that the user is a character in the story, nor does it mean that the user is playing a game or projecting his consciousness into the story as a fantasy. It does mean that the user must have at least as much to do with the story as the reader of a book has. He must be able to access the story, turn pages, savor and reflect. He may, of course, do far more (Swigart 1988, 10).

All these notions lead to an "obvious" user-Homer partnership in the shaping of a novel shaping a void, which means a 3-tiered narrative structuring of a novel shaping a void, which means a 3-tiered narrative (user/Homer, Homer development, story).[9] The interactions between the levels, the continual ups and downs, hint strongly in the direction of Gödel, to that metaphorical fugue of minds and machines that California's New Age physics has shaped, in the line of Fritjof Capra or Douglas Hofstadter of *Gödel, Escher, Bach* fame.

The user/Homer tier, of course, has strong meta-narrative (or should I say meta-operational? or meta-navigational?) implications. In fact, the text seems to identify with, and narratize the very experience of the game/detection/reading – that is, text retrieval – in front of the computer screen (quite often does Homer ask for, and promise cooperation and interactivity, albeit simulated), particularly in reflecting and instructing the "philosophy" of *Portal*: "Again Homer interrupted me. I soon learned that I must go to Homer often" (*P*, 25).

Out of purely technical questions, there seem to be other profound implications:

> When Homer became the narrator, it also acquired character and personality, and hence a double or reflection of the user, limited, but in some respects acquiring parts of the user's characteristics and personality – at least it should seem that way. Somewhere in the reader-response area of existence, the social construct the reader projects onto Homer. If this makes sense, Homer should also present a different way of organizing information, originally thinking in screens (Swigart, Email).[10]

E)   State of the art computer technology plays a "necessary" role in the selection of narrative elements: the computer and its peripherals are part of the story, the keyboard and some kind of a pointing device, high resolution color screen and stereo sound. The story does include computer generated graphics (maps, charts, oscilloscope traces, radar trajectories, sat-

ellite weather step-framed video looking like false-color Landsat photos) and aural expression (for instance, in the Amiga version, sound includes sampled and synthesized composition, though no effects nor computer voice).

Limitations of the efficacy of the narrative are strongly determined by technology's costs. Homer's narrative spaces in the novel include commentaries, scenes and philosophical mumblings: it progressively moves from producing silent texts on the screen, to retrieving images from databases, to expressing itself vocally. The technology for producing the images and sounds the text implied simply was not available at reasonable costs at the time *Portal* was conceived. Were it redone, "then perhaps Homer would narrate certain sections with revived video from the monitors, and we would have brief 'drits' (dramatic units)" (Swigart, Email).

4.   In spirit, interactive fiction and hypertexts were already transparent in novels like Borges' *The Garden of Forking Paths* or Pynchon's *V.* (Minganti 1993), later to be termed postmodern texts; but we had to await computer technology and the chance to play with it in order to notice an evolutionary step in the art of fiction. The virtual zone between the writer's imagination and the reader's involvement, inspired by stories, is like a mysterious choreography which readers can now "dance with a machine" (Swigart *CN*, 57) – "and Hypertext Is Only the Beginning. Watch Out!", as Coover titles a box to his *New York Times Book Review* piece (Coover, 8).

From this perspective, *Portal* was well ahead of its time and an overlooked testimony to the phase-shift texts are undergoing, "from solid to fluid," towards a New Orality – "hyperlinked, multimediated, and all" – where criticism may swap electronic fluids with authors, and where paper may well soon become the Brand New Medium (Swigart, Email).

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