ICD08876 JULY 1982 VOL.3 NO.4

# Video Review®

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THE WORLD AUTHORITY ON CONSUMER VIDEO

EXCLUSIVE: First Review of STAR WARS On Tape! By Rex Reed

## DISC BREAKTHROUGH?

## CBS LABS TEST PIONEER'S NEW PLAYER

## Annual Guide to Latest VCRs

## Special: Creating Your Own Games

## Repair Your Ruined Tapes

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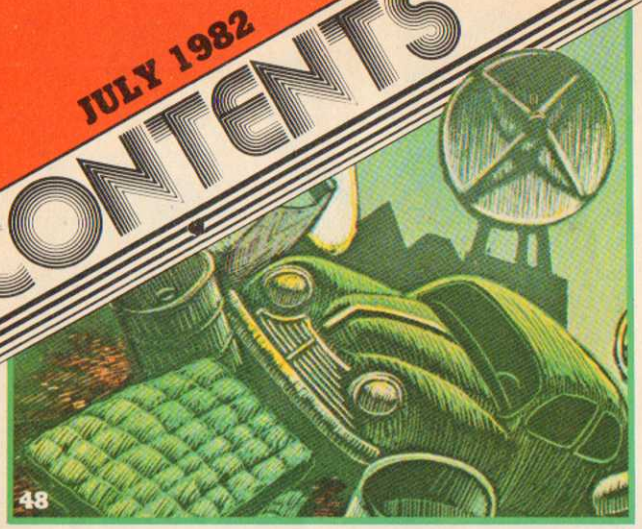


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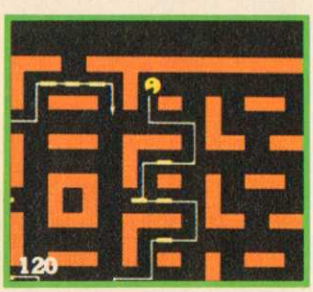


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Cover Photo: Aaron Rezny

READERS' COMMENTS

# LETTERS

# Video games, names and Reds

## GAME POINT

Thanks for ending the frustration of trying to "turn over" the video game "Space Invaders" with your April cover story, "Champions' Secrets for Beating the Best Video Games." Great article!

However, I think you missed one small point. On the Atari 2600B game console, *rapid* fire on "Invaders" can be achieved by turning the console off, then turning it back on while simultaneously pushing the game-reset button. It works like a charm—not only on the game's first level.

Thanks again for a very informative article. Now how about "Pac-Man"?

J. Ray Stout
St. Petersburg, FL

• *Thank* you! *As for "Pac-Man," the Atari cartridge hadn't been released by the time the April issue went to press. But take a look at p. 120 this month.—Ed.*

## BOND FIRE

The woman in the picture with James Bond (Sean Connery) in your April Previews feature is not Pussy Galore, as the caption states, but Plenty O'Toole. If you recall, the lines go like this:

*Plenty:* "Hi. I'm Plenty."
*Bond:* "But of course you are."
*Plenty:* "Plenty O'Toole."

Brian Gessner
Charleston, WV

• *But of course you're right, and the Bond fans on our staff are turning in their jetpacks. Among the others who wrote in about the slip-up: Bob Brandenberger, Absecon, NJ; Bill Mullin, Falls Church, VA; Steven Wolman, Longmeadow, MA; Mike Hollo, Oregon, OH; Saul Wexler, Chicago, IL.—Ed.*

## THE READ MENACE

The editorial in the March '82 issue of *Video Review* titled "Video Rips the Iron Curtain" was Cold-War anti-Soviet propaganda that could have been written by the US State Department.

In spite of a totalitarian government, the standard of living and the cultural level in Poland are higher than those in most countries. This is because of Soviet aid and socialist economic planning after the nearly total destruction of World War II. No mention was made of those countries in the so-called free world where only a small elite group can afford the luxury of video while the masses live in abject poverty, oppressed by US-supported dictatorial regimes.

*Will the real Pussy Galore stand up? Not if 007 has his way.*

Shelly Weltman
Flushing, NY

## 'MIDNIGHT BLUE' BLUES

I wish to take issue with a letter that appeared in the *Video Review* Letters column in which Alex Bennett claims credit as the creator of the concept that became Al Goldstein's *Midnight Blue* cable-TV program.

To correct the record: Bennett did not become involved with *Midnight Blue* until more than a year after the show premiered on New York City TV. While with *Midnight Blue*, Bennett worked long and hard, making contributions that were and are appreciated, to assist in bringing to fruition Goldstein's vision of a magazine-format cable-TV show featuring erotic news and entertainment.

In fact, *Midnight Blue*'s format is similar to that of *Screw* magazine, a publication created by Goldstein some 13 years ago. Anyone who has seen *Midnight Blue*, who reads *Screw* and who knows Al Goldstein will quickly realize that the same unique sensibility informs all three.

John Kois
Milky Way Productions
New York, NY

## MUSICALS: OFF KEY?

While I agree generally with Roy Hemming's comments on '50s movie musicals (Critics Choice, *April '82 VR*), I feel he overlooked several of the better musicals of that period while including some of lower caliber.

For example, he chose *Pajama Game* as a Doris Day vehicle on the list, but omitted *Love Me or Leave Me*, Doris' best musical and perhaps the only great dramatic one. Similarly, he chose a mediocre Jane Powell musical (*The Girl Most Likely*) while ignoring *Seven Brides for Seven Brothers*, superior on all counts and perhaps the outstanding *dancing* musical of all. He also overlooked two other top '50s musicals, *High Society* and *The Great Caruso*.

Bob Avey
Bedford, MA

• *Roy Hemming replies: "There are so many great '50s musicals that narrowing the list down to 15 (more than the 10 we chose for our previous '30s and '40s articles) inevitably meant leaving out some deserving pictures. I most reluctantly left out* Seven Brides *and* High Society, *consoling myself that some of their best numbers were in* That's Entertainment. *Choices were not made on the basis of being either Day or Powell vehicles, but on the pictures' significance musically or cinematically. Thus I'd argue that* Pajama Game *is much more cinematic than* Love Me or Leave Me, *which is really a drama with songs— in contrast to* A Star is Born. *As for* The Great Caruso, *even Lanza and the wonderful Dorothy Kirsten couldn't save it from its inaccuracies or maudlin cop-outs."* □

*Correspondence addressed to* Video Review *is only answered in print in the Letters or Questions pages, space permitting. Sorry, no personal replies.*

ART LEVIS

NEWSBREAKS

# Video game mania, monitors & other flashes

*Art Levis*

☐ **MORE FUN IN GAMES:** More and more companies are casting friendly eye on glamorous video game industry. Quaker Oats is bidding for lucrative share of games feedbag through acquisition of US Games, which will sell cartridges under Vidtec brand name. First release is Atari-compatible "Space Jockey," with more to come.

Through subsidiary Gabriel Toys, CBS will offer Atari-compatible game cartridges by Christmas. Many or all will be home versions of coin-op arcade games now under development, through exclusive agreement with coin-op giant Bally. CBS is also casting eye on foreign markets, seeking to buy Ideal Toys and use Ideal international network for distribution of video games in Europe. Games By Apollo, other new cartridge entrant, has just introduced four Atari games ("Racquetball," "Space Cavern," "Lockjaw" and "Lost Luggage"). Mattel Intellivision cartridges are slated for later in year.

* * *

☐ **THINKING THIN:** First version of long-awaited flat-screen TV set should be in stores by early fall. Sony's Watchman is tiny two-inch (diagonally), black-and-white set in case only 1¼-inches thick. Sony Chairman Akio Morita told us technology used in Watchman will be applied to larger screens, eventually including color.

Watchman uses same cathode-ray tube technique employed in conventional TV sets, but electron gun which fires electronic images is positioned beneath screen. In standard TV set, gun is placed directly behind screen, resulting in bulkier cabinet depth.

* * *

☐ **MOVE TO THE REAR:** Work on reducing cabinet size also going on in opposite spectrum of field—giant-screen TV. Newest trend is introduction by virtually every projection-TV set maker of slimmer, lower sets with smaller but brighter pictures than those of earlier models. New ones are all one-piece models, and use rear-projection tubes. Latest companies with one-piece rear-projection television sets: Sony (45.7-inch screen, $3,800), GE (40-inch screen, $3,600) and Panasonic (40-inch screen, price not available).

* * *

☐ **COMPONENT PROPONENTS:** Video componentry is sweeping through TV field, with Panasonic and Sanyo joining Sony, Teknika, others. Panasonic will sell new Omni Series of components, including high-resolution 19-inch monitor at $649.95, four-source controller/tuner at $449.95 and speaker set at $59.95. New Sanyo Pro-Ponent Series includes 19-inch monitor ($599.95), video controller ($399.95), audio system combining tuner, cassette deck and turntable ($799.95) and speaker system ($199.95). Sony is also beefing up its component line with new 12-inch Profeel video monitor (price to be announced).

* * *

☐ **I CAN GET IT FOR YOU WHOLESALE:** Low VCR prices could go even lower in next few months—reaching supplier cost level in some cases—if sales don't pick up soon. Though sales are healthy, given state of economy they're not meeting earlier industry forecasts.

Meanwhile, inventories at manufacturer/distributor level continue to pile up. How to move them out of warehouses? Cut prices. Sanyo did just that recently, lopping $100 off low-cost model and reducing suggested retail price to $499—lowest manufacturer's suggested price yet. Others are certain to follow in near future.

* * *

☐ **PACIFIC OVERTURES:** Japanese school children are using new video technology to communicate with outside world, presenting culture, customs, etc. on videotape. Editions of "Video Letter From Japan" (sponsored by TDK and Asia Society) are being distributed to 60 elementary schools across US. First two "letters": *My Day* and *Tokyo Sunday*.

* * *

☐ **WINDOW SHOPPING:** VSDA sticker in your local video store's window means tapes inside are legit. Decal is part of Video Software Dealers Association (about 800 outlets) members' attempt to curb sales of pirated tapes. Other provisions include buying tapes specially sealed by manufacturers to let dealers know if tapes have been tampered with or dubbed.

FREEZE-FRAMES

CARL S. KAPLAN

# Atari's trolley, transvestites and Jane

## Atari Trolley

Warner Communications' Atari division is richer than many third-world countries, so it's only fair it give some money away to charity. Which charity? Well, that's a matter of public relations.

Earlier this spring, Atari threw a big parade and gave a $1 million pledge to the Committee to Save the Cable Cars, a non-profit corporation dedicated to restoring San Francisco's famous form of public transportation.

In a public ceremony attended by SF mayor Diane Feinstein, Atari chmn. Raymond Kasser said, "The cable cars are a plucky symbol of not only San Francisco, but the entire Bay area. I'm a citizen of the city, and Atari has more than 5,500 employees in the area. We're all proud to live here, and wanted to make a contribution."

A few weeks before the Atari contribution was announced, a member of the San Fran Board of Supervisors made a motion to re-examine the city's zoning laws for video games. "It's unfortunate that the Atari pledge hit the newspapers the same week that the issue of controlling video parlors was being debated by the public," says Save the Cable Cars staffer Quentin Olwell. "It made Atari's gift to the city look like a bribe. But it wasn't."

Bribe, no. Good timing, yes.□

## High Lie

Lie detector examiners, like cops, tend to put the English language on stilts. "We specialize in providing loss prevention services to the retail community," Rob Soloman, exec v.p. with CA-

based Diogenes Systems, told me recently. "We perform security interviews."

I called Soloman because I heard his company had recently developed a working prototype of a video lie detector.

"Yes, that's correct," he said over the phone. "Changes in respiration, cardiovascular response, breathing rate, etc. are now processed through a computer and displayed on a video monitor."

"Do you think the lie detector industry will adopt the video angle?"

"Of course. It's like the first time you watch color TV. Once you see it, it's pretty hard to go back."

"May I ask you a question I've always been curious about, Mr. Soloman? Is it possible for someone to beat the lie detector?"

"Well, maybe a couple times out of a thousand we get a faulty reading. Our most common problem is that the salespeople we screen in California are frequently high or low on drugs. It screws up our test patterns. We've also had people come in with thumbtacks in their shoes, in hopes the pain will throw off our instruments."

"What about a Yogi who can control his heart beat? Can he beat the machine?"

"Yes, but his video chart would look funny."□

## Bus Stop or Bust?

As a tie-in to *VR*'s recent cover story on Marilyn Monroe by Norman Mailer, 20th Century-Fox staged a "Star Festival" salute to Marilyn Monroe—"The Queen of the Silver Screen is now available on videocassette." To top it off, the studio's p.r. department staged an MM look-alike contest in New York City, and here's a report from our man on the scene:

"Thirty-three contestants showed up at Sam Goody's in Rockefeller Center on Saturday, April 3. Around 150 onlookers were there to look on. Lanie Kazan, the singer who always belts out 'The Copacabana Song' on the Jerry Lewis telethon, was top tomato and chief judge.

"After a couple of walking-down-the-aisle routines, the judges winnowed the pack down to six finalists. The one transvestite hopeful didn't

make the finals. At this, half the audience left in disgust.

"And now the envelope please . . . The winner is Bettina Lapinski, 22, a model from West Germany."

First prize was a VCR plus a one-year employment contract with the Ron Smith Celebrity Look-Alike Agency of Hollywood. (The big time at last!) Second prize was seven MM movies on videocassette. Third prize was 50 bucks, which isn't enough to buy one Marilyn cassette.□

## True Believers

One extreme example of Japan's all-for-the-company ethic is the case of semiconductor giant Kyoto Ceramic.

Two years ago KC built a tomb for its employees. Apparently, it doesn't just promise lifetime employment, it offers eternal interment.

Another, even more bizarre instance of the Japanese labor-management relationship is given by a worker for Matsushita Electric Industrial Corp., manufacturer of most VHS VCRs sold in the world today.

According to the *Nihon Keizai Shimbun*, a Tokyo daily newspaper, Matsushita has a "fabulous worker" in its VCR department who is "about to submit the 20,000th improvement proposal to the company in the course of his quality control activities." The man claims that his happiest time is when he and his wife tidy up his proposal at home together.☐

## China Sin-dromes?

What goes on behind the industrious facade of a rural commune in China? The answer may surprise you.

According to the Communist Party newspaper *People's Daily*, China is in the midst of a crackdown on the "bourgeois corruption" of pornography. Obscene books have been seized in Peking, and arrests made for showing porn videotapes in southern provinces. Specifically, says the article, 18 screening centers set up in rural communes had shown more than 170 X-rated tapes since last December. The total take: around $122,000.

The smugglers, I suppose, have been re*ed*ucated.☐

## Pigging Out

I don't know for sure if the national poundage has increased since the birth of television, but I'd be willing to bet it has. Yodels, Chinese dumplings, baloney sandwiches and beer—you name it and someone gulps it in front of the tube.

One vital matter remains unsettled, however: What type of program induces the viewer to snack the most? Wouldn't Pepperidge Farm like to know that? After all, scientific eating data could tell the food companies which shows to sponsor.

Happily, evidence pointing to the most appetite-arousing program is starting to trickle in. Marketing execs take note: A recent *New York Times* feature on the Mississippi Delta reported that one pig farmer has found the secret for raising the fattest hogs in his county. "He has installed a television in every sty," says the *Times*. "He reports they especially like to eat and watch wrestling."

Look for Andre the Giant to start endorsing Milano cookies. You heard it here first.☐

## Compu-Boo-boo

"Computers don't make mistakes," a computer hacker once told me. "Do pencils make mistakes?" At the time, I couldn't argue, but now I'm beginning to wonder.

A few weeks ago, the *Wall Street Journal* reported that IBM's new personal computer occasionally makes a boo-boo in simple mathematics. What do you get when you divide .1 by 10? The answer is .01. But the IBM brain in some cases answers .001.

The computer, it appears, has a gremlin hard-wired into its circuits that can cause it to give wrong answers on some arithmetic problems. Jeannette A. Maher, a spokesperson for IBM, told one reporter the mistake was not in the arithmetic but in communication. The computer *knows* the correct answer, she explained, but under some circumstances it errs in positioning the decimal point when it displays the solution on a video monitor.

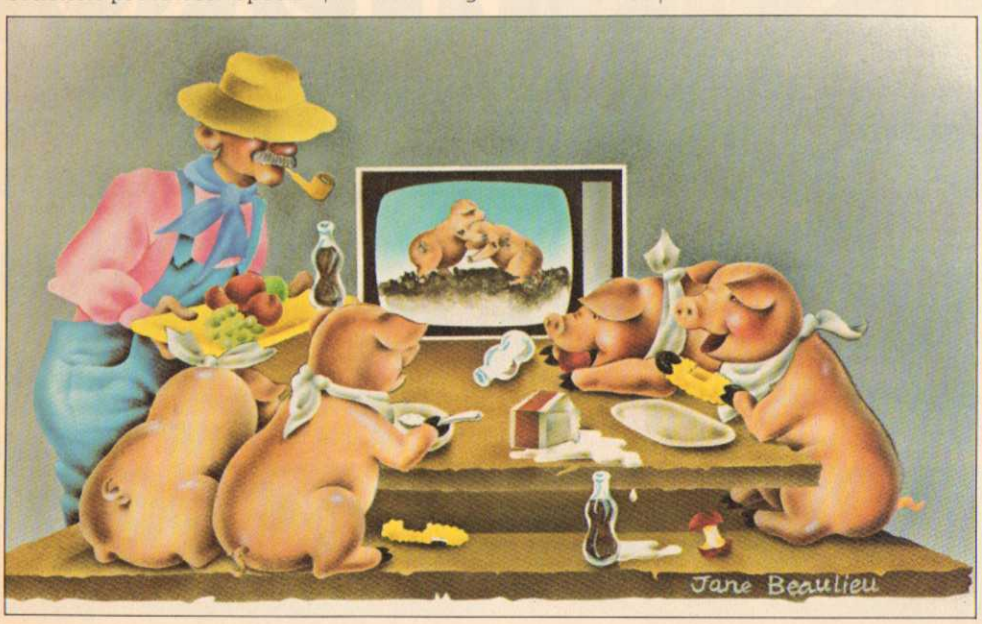
If I understand her correctly, Maher is saying the computer knows the real answer but has difficulty expressing it. A nice distinction—worthy of a human.☐

## See Jane Work Out

Svelte Jane Fonda has transferred her *Workout* book to CED-format videodisc.

The press info from RCA about the 90-minute SelectaVision disc says: "Long an advocate of physical fitness, Miss Fonda became a leader in the field with the opening of her first workout salon in Beverly Hills. This led to other salons and eventually to the publication of her book *Workout*, which has been a bestseller."

The release neglects to mention that Jane's cut from the video sales of *Workout* goes to husband Tom Hayden's political organization, Committee for Economic Democracy. The disc is brought to you by CED for CED.☐



**GENERAL ELECTRIC**
**Videocassette Recorder**
***Model 1VCR3018W $1,500***

This VHS-format VCR features stereo sound, four video heads and wireless remote control. It records and plays back in three speeds, with special effects (slow motion, freeze-frame, frame advance and forward and reverse scan) in the SP and EP modes.

The tabletop model can be programmed for eight events over a three week period. Up to 16 channels can be programmed into the tuner, which has midband and superband channel capabilities.

*GE, Wellner Drive, Portsmouth, VA 23705 (804) 483-5000*

**BASF**
**Blank Tape**
***Beta L-750 $29.95***

Now there's another L-750 tape to choose from. Its chromium dioxide formulation is intended to cut down video noise and signal loss.

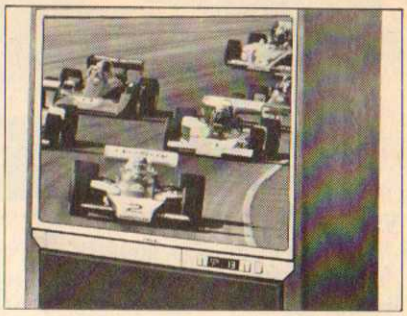
*BASF, Crosby Drive, Bedford, MA 01730 (617) 271-4000*

**SONY**
**Rear-Projection TV Set**
***Model KPR-4600 $3,800***

This rear-projection TV set aims to please. Sony says it made the set shorter than other rear-projectors so the viewing angle is better for people who are seated. And the model doesn't take up much more space than a conventional 26-inch console, according to Sony.

The screen is a redesigned version of the black matrix type, for a sharper picture over the whole 45.7-inch (diagonally measured) screen.

One pay-TV service can be connected directly to the set, working, as



do other functions, with a wireless remote control. Multiple audio and video jacks allow connection of video and stereo equipment.

*Sony, 9 W. 57th Street, New York, NY 10019 (212) 371-5800*

**JVC**
**Videocamera**
***Model GX-S9U $1,100***

This camera features stereo mike jacks and a control allowing mixing of the two channels. Other built-in features include automatic fade controls, automatic white balance, automatic iris control and an adjustable viewfinder.

The camera has a ⅔-inch Vidicon image pickup tube, and its *f* 1.6, 6:1 (12½ to 75 mm) power zoom lens has macro capability. It comes with a boom microphone, an adjustable grip and a carrying handle.

*JVC, 41 Slater Drive, Elmwood Park, NJ 07407 (201) 794-3900*

**ODYSSEY**
**Video Game Cartridge**
***Freedom Fighters $32.95***

Odyssey's "Freedom Fighters" is a space chase adventure. Players must rescue prisoners from confinement crystals without being zapped into oblivion by enemy warships and killer drone mines.

Several levels of play are possible. The most challenging requires a pilot and copilot team with each player operating laser and pilot controls.

*N.A.P. Consumer Electronics, Interstate 40 and Straw Plains Pike, Knoxville, TN 37914 (615) 521-4335*

## ON THE DRAWING BOARDS . . .

**Sears** goes tubeless with an MOS (metal-oxide semiconductor), solid-state videocamera, to be included in the company's Christmas catalogue. Also, the department store chain will have its first stereo CED-format videodisc player out next month . . . .

**Atari** should have its "System X" high-resolution video-game components in stores not long afterward.

**What's yours is nine:** There could be T-180 length, VHS-format videotape—that's three, six and nine hours of record/playback in the SP, LP and EP modes, respectively—from **Memorex** and other companies, although no time soon.

**3M/Scotch**, meanwhile, is developing "vapor deposition," a new method of laying magnetic oxides on tape. According to 3M, it's designed to reduce dropouts by gentler tape handling in the factory.

**1984:** Recent developments indicate that's earliest possible year for 8 mm video, or one-piece videocamera/VCR combos. Reps of **Grundig**, **Hitachi**, **JVC**, **Matsushita**, **Mitsubishi**, **NEC**, **Philips**, **Sanyo**, **Sharp**, **Sony** and **Toshiba** were among those from 120 companies who met in Tokyo for recent standards talk. Could mini-video be to current gear as Instamatics are to 35 mm film cameras? . . . Speaking of which, photo-equipment giant **Canon** will have a Matsushita-made VHS-format portable VCR out by next month or so, accompanied by a high-priced, highly automatic videocamera.

—F.L.

# YES, YOU CAN CREATE YOUR OWN...

# VIDEO

There's a video game Controversy, with a capital "C," and that rhymes with "P," and that stands for "Pac-Man." But no matter what side you're on—whether you're addicted or averse to Coin-ops and Cartridges—there's a Compromise you've probably never heard about, with a capital "C," and that rhymes with "P," and that stands for Programming.

At least 800,000 Americans will shop for home computers over the course of this year, and 43.5 million will be buying video game cartridges, according to *Consumer Electronics Monthly* magazine. The home computer owners will probably balance their checkbooks, and the game players will eagerly gobble little glowing men. But somewhere between their two worlds—the practical and the practically crazy—lies the little-known sphere of *game programming*. With a personal computer, a touch of imagination and the following essential guidelines, it's now possible to transform video games into something not only fantastic and fun, but also creative, stimulating and even enlightening—by programming them yourself.

In the early days of Atari, Nolan Bushnell and his crew forged a number of video game principles. At one time, Bushnell even made a list of "Guidelines for Creating Popular, Lasting Games." They were designed for internal use by the creators of the first video games, but Bushnell told us what they are anyway:

1. Games should be challenging, competitive and gratifying.

2. Games should be fast-paced and exciting to play, but not so difficult that the average person cannot pick up on the essentials the first or second time.

3. Games should require a blend of skill and luck, allowing the player to become more adept as he or she plays the game.

4. Games should require strategy and quick reflexes.

5. Games should be flexible, allowing one player to compete, with options for two- or four-person play.

6. Games should not be too long or too short, but designed to allow the maximum enjoyment during a competitive playing time.

7. Games should allow the player to live out his or her fantasies—for instance, to become a jet fighter pilot, a race car driver or a pinball wizard.

Photo: Aaron Rezny

Most video games challenge the player's hand/eye coordination, but not all. More and more games require other skills. "Trick Shot," one of Imagic's first offerings for use with Atari's VCS, is a pool/billiards game based more on strategy than on hand/eye coordination. But few people like to read the rules to a game completely. Indeed, part of the appeal of electronic games is that you turn them on and go—no studying of rule booklets necessary. Games in general should be easy to learn.

### Playing vs. Gaming

Another essential element is that players should have meaningful choices throughout the game rather than just one way to play. One game creator told us, "I can't create a good game unless it's a game I'd be interested in playing. I put a game together like somebody might put together a piece of machinery. I start with the format and mechanism because they are most important."

A computer is a simple thing compared to you and me. Like a newborn infant who must have everything done for it by another human being, the computer is incapable of initiating activity. Without human intelligence behind its every move, a computer would only be useful as a paperweight or a doorstop. You don't necessarily need a computer; a computer needs you.

# GAMES

It works on a binary number system; thus, it is capable of just two "thoughts"—a switch is opened or closed, represented by a 1 or a 0, as it reads and executes a program. The program is like an enormous railroad yard full of places to change tracks. The computer uses a program to move along a predetermined track in the form of electronic switches that are either open or closed. Each letter on the computer keyboard represents a different series of eight switches to the microprocessor, or "brains," of the machine.

In order to communicate with the computer, you must use a computer language. Most home computers use some form of BASIC (Beginner's All-purpose Symbolic Instruction Code). Each company employs a different "dialect" of BASIC in order to sell its programs along with the computer, but the differences aren't really radical. To keep things simple, this article describes programming with the Atari 800, although the sample game program will probably run on most home computers without much modification.

Before we start talking about programming, it's important to stress that the technical know-how it takes to produce the best computer video games is far beyond the scope and length of this article. This is a beginner's course, but it provides a framework with which you can build a complex adventure game—whether you want to run it on your home computer or you want

to act as the computer to lead your friends on a non-electronic adventure with this magazine. The following game, "Rescue the Wizard," can be played without a computer if you learn to read the program as the computer would. (By reading through the program first, though, you can do a little cheating.)

Unlike us mortals, computers only do what they are told to do, whether it's right or wrong. A computer program is a listing of sequentially numbered steps; the computer begins with the lowest numbered step and goes on to the next, unless otherwise instructed.

Take a look at the line numbers in the program listing for "Rescue the Wizard." The reason the steps are spaced apart by 10 digits through most of the program is to enable you to make later additions without having to renumber the entire program. So it doesn't really matter what numbers you use, so long as they're in sequence and there's some space between them.

As printed here, "Rescue the Wizard" is a simple program, but you'll find it easy to complicate the game even if you have no prior computer experience. Although there are dozens of BASIC commands that can be used, this program uses only seven: REM, PRINT, INPUT, IF . . . THEN, GOTO and END.

A remark (REM) command is ignored by the computer because it simply means a note to the programmer or player as to what the game is. You can use as many remark statements as you like in a program.

The second step in our game program uses the print command. When the computer reads this step, it will print on the screen whatever letters, numbers or characters fall between the quotation marks following the word "print." So, if you're playing the game without the aid of a computer, and you're directed to a step that says PRINT ". . . .", read the message inside the quotation marks to yourself as if the computer had printed it on the screen, then go to the next step. The print command can be used without quotation marks to perform arithmetical operations. For example, when the computer reads "10 PRINT 23×37," it will immediately print "851" on the screen.

The input command is always followed by a letter variable. Line 60 of our game program reads "INPUT V." No matter what letter follows the input command, it causes the computer to print a question mark on the screen and then wait for the player to respond by pressing a key on the keyboard. So with the input command, you can give the player a choice of options in any situation. Steps 40, 41 and 42 are the player's first set of choices in "Rescue the Wizard." The player must choose one of them by pressing the number 1, 2 or 3 on the keyboard. So at step 60, the variable V must take on the value of 1, 2 or 3.

Steps 70, 71 and 72 are IF . . . THEN steps used to test a condition. Step 70 means that if the variable "V" stands for the number 1, then go immediately to step 430 without reading the steps in between. The GOTO command is similar. It will always be followed by a program step number to which the computer is being sent. So, for example, step 420 in the program says "420 GOTO 1000," meaning skip from here to step 1000 and begin reading the steps sequentially from there.

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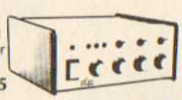

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GAMES

# Tips for scoring more on 'Pac-Man'

*Fig. 1* Opening: Try to take the vitamin.

*Fig. 2* Mid-game: Dash your way to victory.

Guess who's coming home to dinner? None other than that internationally renowned gobbler, Pac-Man. If you're addicted to the "Pac-Man" arcade game, though, once you set the new home version chomping you may find yourself feeling as though you invited Sidney Poitier but got Gary Coleman instead.

Not that this VCS cartridge game isn't challenging. It is. It's just not as sophisticated as the arcade version; something seems to have been lost in the translation. The new cartridge (Atari, $39.95) displays fewer dots (actually, dashes in this game), a wide rather than long playing field with exit tunnels at the top and the bottom rather than at the sides, plus a maze that's nothing like Midway's.

## Flicker Bicker

But to us, the most disturbing difference is that the game's four ghosts constantly flicker. Due to the technological limitations of Atari's VCS game console, the "Pac-Man" cartridge can only display one ghost moving on screen at a time. So the ghosts alternate by flickering. This is most annoying when you're watching to see them turn from chasee to chaser. Only if you can forget the different look and overcome some difficulty in maneuvering with the joystick, you could end up just as hooked on this game as on the coin-op version.

There are eight variations on the cartridge: the combination of two speeds for Pac-Man and four for the ghosts. The result is a game that can be matched to almost any player's skills. The player has four lives; that is, Pac-Man can be eaten four times by the ghosts before the game ends.

## Power Pill Play

The object is to gobble down the 122 dashes for one point each, the four power pills for five points each and an occasional vitamin, appearing just beneath the ghost base, for 100 points. For several seconds after eating a power pill, Pac-Man can eat the ghosts, and this is the key to scoring high. The ghosts will chase Pac-Man until he eats a power pill, then they will turn scared (blue) and run away. It's worth chasing down as many of them as possible, because during any single energized period, the first ghost eaten scores 20 points, the second 40, the third 80 and the fourth 160 points.

Of course, eating ghosts isn't the whole game. Each time Pac-Man clears the maze of dashes, a new maze appears, and the round begins again, with slightly faster ghosts. A pattern you develop for the first board will not necessarily work on the second, since the ghosts will have changed their speeds. One hint: The ghosts always exit their base on the right side.

As I mentioned before, the joystick is a little hard to work. Once you make a turn and Pac-Man is heading in the direction you want, you'd better let the joystick fall into its normal position. Pac-Man will continue until he hits a wall or you turn him again. In starting a game, it's useful to point the joystick in the direction you want Pac-Man to head in order to get a jump on the ghosts.

There is one peculiarity about the joystick that needs some explanation. You are supposed to use only the four main compass points—north, south, east and west—for steering. But if, for example, you hold the joystick northwest, Pac-Man will head north until he hits a wall, then west until he hits a wall, then north again, then west again, and so forth.

## The Strategy

Now, let's get down to strategy for Game One, as shown in Figs. 1 and 2. The reason for circling around the ghost base in the opening in Fig. 1 is that occasionally, at point A, a 100-point vitamin will appear at the beginning of the game. This strategy lets you pick it up. Don't be afraid at point B: The ghost heading for you will miss by a hair. By the time you get to point C, you will have eaten 51 dashes. Since there are only four power pills to eat 122 dashes, the average must be 30 dashes each, so you're ahead of the game here. At point D, you're on your own to grab the remaining dashes near the center, track down ghosts and head to the left side of the maze. □

## YOUR OWN GAMES ...

*Continued from page 54*

The last command used in this program is used to end *every* program: END. This command should always be used as the last step in a program to return control of the keyboard to the user once the program has ended. If you typed the simple program, "10 PRINT "HA-HA-"; "20 GOTO 10" and ran it, the screen would fill up with HA-HA-HA-HA- . . . . You'd have to interrupt the program to make it stop.

Following both the program and this short text, read the introduction—it contains some clues that will help you solve the game. Now, read all the words inside quotation marks after the print statements from lines 10 through 50. At step 50 we decide on choice 2, so we input 2 as the value of V in step 60. We go through step 70 but nothing happens because the condition is false. The condition is true, however, in step 71, which directs us to step 80, so we skip over step 72. At line 80, we read the "print" statements through line 130, where we must make our second choice. Again we choose number 2, input 2 as the value of W, then at line 151 we jump to line 160. We read the print statements through line 210, input 3 as X and are directed to step 250.

Reading the print statements through line 280, we choose the first choice, input 1 as the value of Y and go to step 310. There, we read the print statements through line 350. We choose number 2, input 2 as the value of Z, and read, in steps 380 through 410, that we've won the game. Step 420 directs us to step 1000. We read "Game Over."

### Expanding 'Rescue'

You can take this skeleton of a game in many different directions, and the more experience you have with programming, the more you can complicate the game. But even if you only use the commands already in the program, you can make this game more challenging. One of the first things you might do is add more choices at each decision point in the program. This could involve adding information to the introduction—new rules that affect the warrior during the game, such as giving the warrior other weapons or special powers in certain situations.

For example, let's add a fourth choice at the first decision point in the program. Look at lines 40 through 72 in the program listing. They offer the player three choices. To add another, first insert: 43 PRINT "4. [add alternative choice]." Then change step 50 to read: 50 PRINT "CHOOSE 1,2,3, or 4." Add: 73 IF V=4 THEN [supply step number]. Finally, at the new step the hero would be directed by choice 4, and create a PRINT statement that would tell the hero what happens.

Once you've added complications in this manner, there are still other things you can incorporate. For example, if you want the outcome of a warrior's decision to be somewhat random, you can add a routine that would simulate the roll of a pair of dice. Here is a simple, two step routine that will print the value of a single die roll on the screen: "10 S=INT (6*RND(1))+1; 20 PRINT S." You could create the rule that an even roll directs a warrior to one response and an odd roll directs him to another response. For this, you would create "if . . . then" statements to test for the value of the die roll. It all depends on what you think should happen. This is your fantasy world, after all. □

### CORRECTION

*Due to a printing error, two manufacturers' names were omitted from "Who's Got What in Videocameras," a chart published in the June '82 VR.*

*The model TC-100E is made by NEC. The models IK-1900 and IK-1850AFS are made by Toshiba.*


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