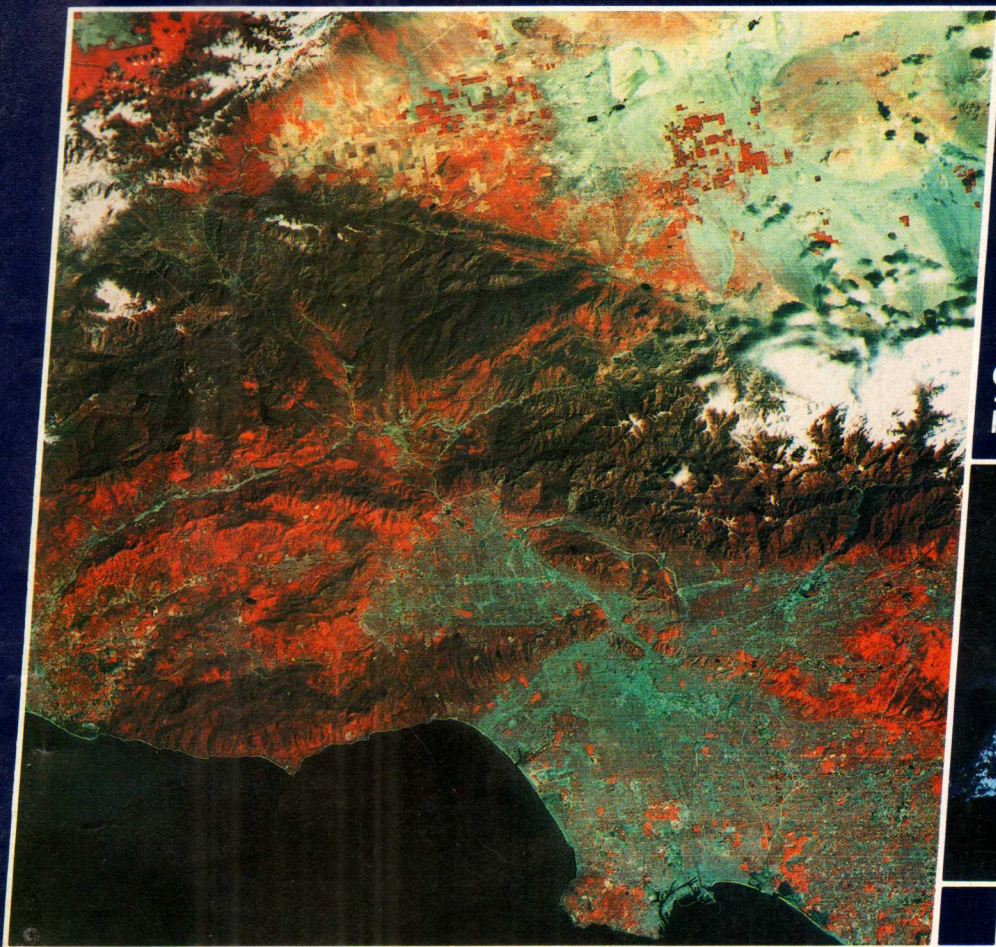


July August 1981

FOR WHEREVER YOU ARE

\$1.50

# GAMES



## EYEBALL BENDERS FROM OUTER SPACE

What part of  
the United States  
do you see  
in each photo?



Answers, page 60  
More satellite photos, page 57







Gordon Cooper  
Former Astronaut

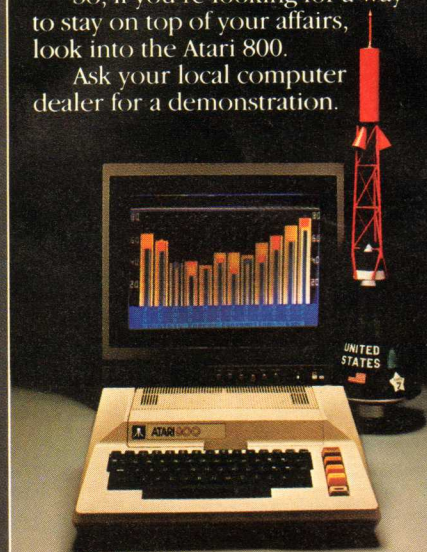
**Gordon Cooper**  
**thinks NASA computers**  
**are out of this world.**  
**But his personal computer**  
**is the best on earth.**

I've been around computers most of my life, and I'm impressed with the Atari®800™. Nothing so complex has ever been so simple. It's as easy to set up as a stereo. It's so easy to operate, your kids can use it.

My life didn't end when I left NASA. Today, I'm a businessman and writer. I've even gone on the lecture circuit. I trust my Atari computer to help me.

So, if you're looking for a way to stay on top of your affairs, look into the Atari 800.

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The ATARI® 800™ Computer

For further information write:  
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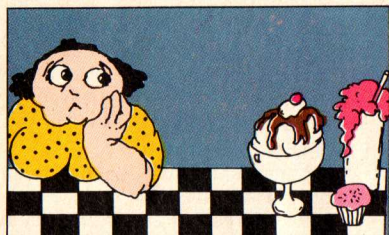
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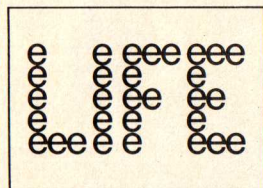
A Warner Communications Company



# GAMES



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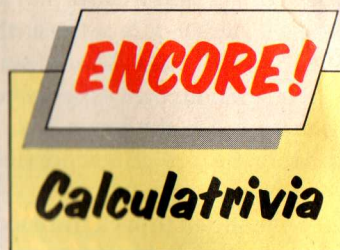
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Difficulty Rating:    Smooth Sailing ★    Uphill Climb ★★    Proceed at Your Own Risk! ★★★    Mixed Bag ★☆



BY PHIL WISWELL

# ELECTRONIC GAMING

FROM WRISTWATCH BOWLING  
TO COMPUTER APOCALYPSE

**T**wenty years ago this Christmas, I played my first electronic game. It was called Fascination, a race game in which the first player to roll his three balls through fairly simple mazes was rewarded by the activation of his color lightbulb. Despite the crudity of the electronics, which in no way entered into the game itself, Fascination remained popular for years.

Electronic technology has come a long way since Fascination. The development of the silicon chip changed our games and the way we play with them. Toy trucks are no longer pushed, but programmed to attack the family pet. Arcade games fit in your pocket. Dolls, once lifeless creatures, walk

play more than one game. The appeal of the "programmables," as they are called, is that they mimic the larger video games without preempting the family room television. They are also portable.

The most innovative new programmable is Atari's Cosmos, with a built-in hologram projector that creates three-dimensional displays. Cosmos, which won't be widely available until 1982, will capitalize on Atari's unequalled video game library. Although unique, the holograms in the cartridges we saw were used only for visual effect. When I asked about truly three-dimensional games in which the player could move his object north, south, east, west, and closer or farther, Atari program developers nodded their heads and smiled: "We're working on it."

Entex Industries, whose extensive line of electronic games has been consistently of high play value, brought out two programmables this year—the Select-A-Game Machine (\$65) and the Table Top Game Machine (\$100)—featuring two-color fluorescent display, a new technique that makes it easier to tell "us" from "them" on the screen. Both systems accept cartridges (\$18 each) for Entex's new Space Invader, Basketball, Football, Baseball, and Pinball games (five more are on the drawing boards).

Another innovation many of us have been waiting for is the combination of electronics and adventure gaming. Traditional adventure games such as Dungeons & Dragons from TSR Hobbies require an experienced Dungeon Master (referee) and don't offer solitaire play. But Mattel's Dungeons & Dragons (licensed from TSR) and Milton Bradley's Dark Tower overcome these limitations by using microprocessors to generate the action and keep track of the rules. Mattel's game uses sound effects and a touch-sensitive board to let you know when a dragon is nearby, when a wall can't be broken through, when treasures are at hand, etc., as you move your piece through the dungeon grid. Dark Tower

does the same with sound effects and pictures.

Hybrid products that combine a calculator or a timepiece with a game are more varied and sophisticated this year than ever before.

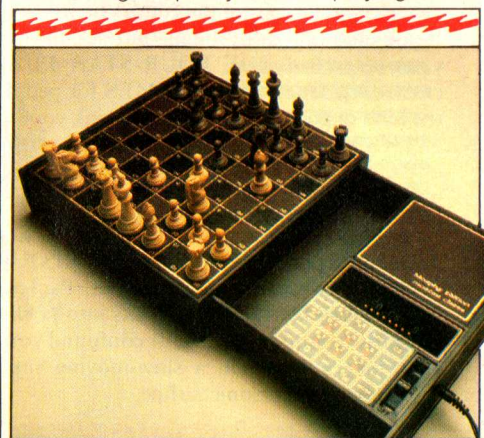
Among the new hybrids is Tomytronic Wrist Bowling (\$40), an LCD digital watch with an alarm clock, a stopwatch, and a ten-frame bowling game. Surprisingly, strategy is not sacrificed for size

thanks to the high resolution graphics in the liquid crystal display, a feature developed by the watch industry.

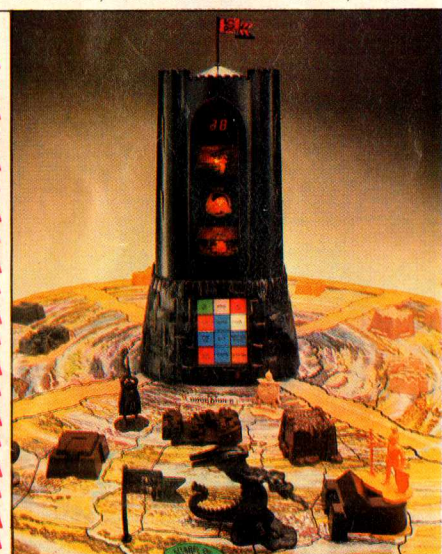
While speech synthesis has been the focus of much research, the games that use it are primarily speaking to children because the speech is somewhat crude and is also limited in vocabulary. But a new speech chip from Votrax will help to change that. Rather than producing whole words, the Votrax chip produces 64 phonetic sounds of the human voice. This allows for a larger vocabulary; and because it also requires less memory than other voice chips, it can be combined with more sophisticated games. One of the first uses of the Votrax chip is in Tiger Electronics' new talking computer for children, which has an impressive 1500-word vocabulary. Mattel and Entex promise sophisticated games using this technology in the near future.

## Classic Computer Opponents

The number of different strategy games programmed for computer play has doubled during the past year. And playing



*The Great Game Machine (shown here with the Morphy cartridge) doesn't talk; doesn't move its pieces around the board; and doesn't have any sound or light shows. But it does have a very strong chess program, and can be used to play five other strategy games as well.*



**Dark Tower is an electronic adventure game for the whole family. The tower swivels so that each player in turn views the screen alone.**

and talk better than some of their owners. And chess computers, initially the size of basketball courts, are smaller than breadboxes. We aren't buying simple playthings anymore; we're buying technology.

## Hand-Held, Tabletop, and Board Games

At the Consumer Electronics Show in Las Vegas and the Toy Fair in New York last winter, manufacturers displayed a slew of new products that they hope will entice the inflation-weary to spend \$50 on a game. As temptation they offer a variety of small, programmable machines that

Phil Wiswell is editor of the *Games & Books* column, which will return next issue.



strength, in some cases, seems to have quadrupled, due mainly to the continuing miniaturization of microprocessors.

Applied Concepts and Fidelity Electronics, for years the Macy's and Gimbels of chess machines, have both devel-



**World Championship Baseball from Mattel is a sophisticated two-player game offering such subtleties as pinch hitters, relief pitchers, bunting, etc., all hidden from the opponent by a hinged door.**

oped programmable systems that accept cartridges for many classic board and card games, a capacity that will turn some dedicated (single-game) systems into dust collectors. With Applied Concepts' Great Game Machine (\$350), you can play chess, blackjack, kriegspiel, reversi, and checkers simply by inserting the appropriate cartridge (\$70-\$100). More remarkably, the system so far accepts three different chess programs—Morphy Edition Master Chess, Gruenfeld Edition Master Chess Openings, and Capablanca Master Edition Chess End Games—each containing 8,000 bytes (or units) of instructions. The unique feature of this system is that you can use the three cartridges sequentially in the same game, yielding a 24,000-byte program. Our chess expert, who usually scoffs at these machines as "weaklings that roll over and play dead once they're in trouble," tried the Morphy cartridge with the machine on the second lowest of its nine levels. With the machine down a piece, our expert waited for it to flounder. To his surprise, it began to play more tenaciously, creating threats that our expert did overcome, but not without worry.

Fidelity's Card Challenger is the first machine developed to play more than one card game. Using real cards and an optical scanner, the machine will be able to play against, or as partner with, humans at twelve games from Gin Rummy to Solo Whist. (The unit has been delayed because it was not playing up to snuff, according to Fidelity.)

Fidelity premiered five other machines this year, including the unique Dame Challenger (\$150) that plays International Checkers on a 10 x 10 board. It's more complex and strategically deeper than the checkers most of us play. Fidelity

also added a Reversi (better known as Othello) Challenger (\$150) to its line. It has 18 levels (!), allows a player to change levels or sides at any point during a game, solves reversi problems, and features Fidelity's touch-sensitive board. And Gabriel, maker of Othello, has just brought out Computer Othello (\$100), a stylish, compact, tabletop game with eight levels of play. I have not played the programs against each other, but I have played both machines on similar levels and find them comparable in playing strength.

New this year from Europe are no less than seven chess computers from two companies, Novag and SciSys. Novag's Savant (\$625) uses the largest single program (called MYCHESS) in a self-contained unit. It is small and stylish, capable of solving mate-in-seven problems; and instead of real chessmen, Savant's pieces are displayed on a built-in LCD video screen. Another newcomer from Novag is the Robot Adversary (\$1,300), whose robotic arm actually moves its pieces around the board. But at that price it should serve coffee, too.

Two of the five new chess computers from SciSys also feature video screen display rather than chessmen, a trend we like since it eliminates the agony of lost pieces. Executive Chess (\$130), powered by two nine-volt batteries, is potentially the best portable chess computer on the market.

### Video Games: A Long Way from Pong

The hot new features in video games this year are remote-control play from Atari, voice synthesis from Mego, sophisticated strategy games from Magnavox, and excellent graphics from Mattel.

Perhaps the most exciting product is Atari's Remote Control Video Computer System (\$200). Identical in function to Atari's existing V.C.S. (the same cartridges fit both), the new hardware has no wires connected to the hand controls! They operate by remote control up to 50 feet away from the television. An engineering feat, the controls combine paddle, joystick, and fire button, thus eliminating the need to buy different hand controls for some of Atari's games. The fire buttons are heat sensitive, making firing faster and more precise. In support of both the old and new systems, Atari introduced four new game cartridges—Asteroids (a good version of the popular arcade game), Warlords (a two-player pong plus breakout-type game), Video Pinball, and Othello.

In addition to the 50 game cartridges now available from Atari, there are 10 more from Activision, the only company to specialize in video game software. Al-

though Activision's games don't contain as many variations per cartridge as Atari's, play value is every bit as good. If you've played its new games—Laser Blast, Kaboom!, Tennis, or Freeway—then it won't surprise you to learn that all four programmers come from Atari.

Mego's introduction of a programmable video game system utilizing voice synthesis was a surprise at C.E.S. It's hard to tell when (and even if) this one will be produced. But we're watching . . . er, listening.

Magnavox has a new series of master strategy games for its Odyssey<sup>2</sup> video game system, the first of which was Dynasty (Othello). The new game this year is Quest for the Rings, in which players chase the elusive Rings of Power across the Dark Land, working as a team to combat mythical creatures and find treasures. Next in the series is a game based on military battles, in which players try to re-create historical situations.

A game system that can be converted into a relatively sophisticated home computer remains a good idea whose time has come—or perhaps has already



**Atari's new Video Computer System comes with remote hand controls and an Asteroids cartridge. Now you can play from the comfort of your favorite chair, from your bed, from the bathroom. . .**

passed. While this is the best way to test the waters of computing, the cost of conversion is rapidly approaching that of a home computer. Several years ago, Mattel introduced a new system called Intellivision. The Master Component (\$300) is the most advanced home video game you can buy, with superb high-resolution graphics that bring the 30 available cartridges to life on the screen like no other system. An optional Keyboard Component (\$700) converts the system to a home computer with 16K bytes (expandable to a huge eight megabytes). But





**Intellivision is half video game, half keyboard, and the two fit snugly together to make a home computer.**

Mattel has been promising the Keyboard Component for the past three years without actually putting it on the market. With the pace of electronic technology and the trends in pricing, further delay may make Intellivision obsolete before the keyboards reach the stores.

For more than a year owners of the Bally Professional Arcade (still \$300) feared that it might be discontinued, leaving them with no source for new software. But Astrovision has taken over the system from Bally, created five new games that are as good as the existing 19, and introduced a ZGRASS-32 keyboard (\$599) that turns the unit into a 32K home computer. ZGRASS is a powerful programming language—which is strange to see used in a low-end home computer as the industry moves towards BASIC as the standard language for beginning programmers. The software developed by Astrovision and Bally allows the user to create games, displays, music, animation, etc., all in 256 colors.

## Terminal Competition

The most involving form of electronic gaming takes place at a computer terminal, so this year's price reductions are most welcome. The companies marketing home computers encourage the use of games on the theory that once you can manipulate the keyboard to shoot down alien spaceships, you can manipulate it to run an accounting program.

Texas Instruments is offering the most enticement with its TI-99/4, reduced from \$950 to \$650. The computer is supported by more than 500 software programs, and soon this number should rise dramatically since TI has decided to make its three programming languages available to "third-party authors," (you and me). Owners of the TI-99/4 can also sub-

scribe to TEXNET, a service from Source Telecomputing Corp. that offers games, news, weather and travel information, financial reports, electronic mail, and other niceties.

New this year from Commodore (maker of the popular PET computer) is the VIC-20, a color computer for \$299 (less than many TV sets). The VIC-20 comes with only 5K bytes of memory, but it is expandable to 32K and accepts the usual peripherals like a modem and a printer. Designed for immediate "plug in and go" use by the consumer, the VIC-20 was introduced via two games—Chess and Space Invaders.

Recently announced price reductions make the Atari 400 computer now available with 16K bytes of memory for \$630 and the 8K version for \$499. Atari has a 9 A.M. to 5 P.M. "hot line" for customers having computer trouble, and will begin authorizing qualified retailers across the country to act as Atari Service Centers. Two of Atari's three new computer



**Computer Othello uses LCD (liquid crystal display), which creates better graphics and uses less power than LEDs (light-emitting diodes), but precludes the use of color.**

games—Asteroids and Missile Command—are familiar adaptations of the popular arcade games. But there is nothing like SCRAM, in which a player is in control (or out of control!) of a nuclear power plant that is elaborately illustrated from pumps to reactor. The object is to produce the maximum amount of energy before shutting down the reactor or creating a meltdown. Atari calls this an educational program because you learn the laws of thermodynamics, how a nuclear power plant operates, and how to make certain kinds of decisions. True, but I still call it a game.

The Sinclair ZX80 home computer, recently introduced at the impossible-to-beat price of \$199.95, comes with only 1K bytes of memory, just enough to learn

the basics of BASIC. But an optional memory module (\$99.95) increases this power by 16 times.

In a move to compete with Radio Shack's TRS-80 computer (sold in 8,000 stores coast to coast), APF Electronics slashed the price of its Imagination Machine home computer from \$595 to \$395, and announced the IM II, a business computer for \$1,195 that is expandable to 75K bytes.

## The Software Explosion

Most computer users depend on professional programmers to provide a range of applications. This has given rise to a "cottage industry" of thousands of programmers, writing and introducing software at a fantastic rate. In addition to programs for education, personal development, and home finances, these programmers are creating entertainment—computer games and simulations of all kinds.

From Microsoft Consumer Products comes a unique idea: Olympic Decathlon (\$24.95) for the TRS-80 and the Apple II. Each of the ten events—from the 110 meter hurdles to the pole vault—features full graphics and animation, and scores the player by Olympic standards. For the air-war buff, Discovery Games recently introduced six new war games for the TRS-80, the PET, and the Apple. Each historical simulation puts the player in command of a fighter squadron in one of World War II's decisive campaigns. Strategic Simulations just added three new games to a line of seven for the Apple II and TRS-80: Cartels & Cutthroats (the dastardly business of manufacturing), Operation Apocalypse (the invasion of Europe), and Torpedo Fire. All are priced at between \$40 and \$60. Microcomputer Games, the year-old division of Avalon Hill, recently introduced The Lords of Karma, an adventure/fantasy game for the TRS-80, the PET, and the Apple, to its line of 10 computer games. And Automated Simulations, with half a dozen complex adventure games already in its repertoire, now offers Tuesday Morning Quarterback.

Yes, we've come a long way from Fascination. Electronic technology is doing for games what disco music did for roller skating—attracting and captivating a broader and, in many cases older audience of players who embrace electronic gaming as part of the pop culture. We want more sophisticated, more varied, more stimulating games. We want them to involve all our senses, to dazzle us with light shows and sound effects that will leave us breathless. And that, year by year, is what we are getting.