

# Geschichte und Ästhetik der audiovisuellen und digitalen Medien II

1972-1978

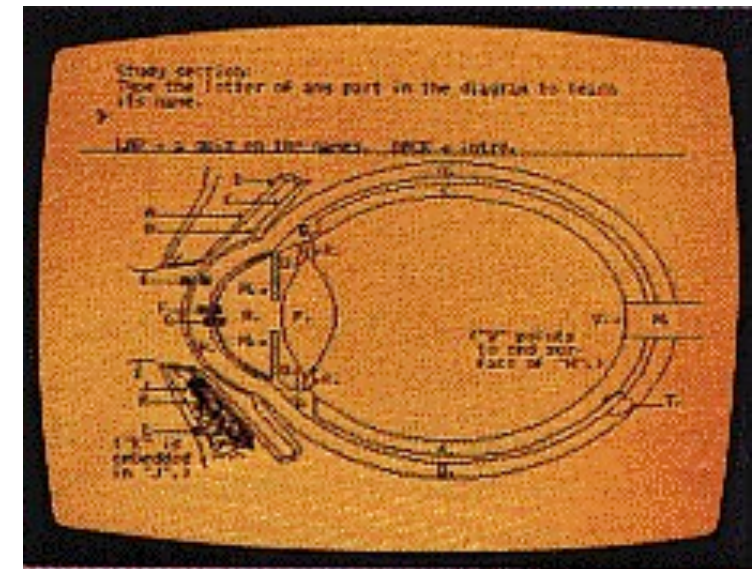
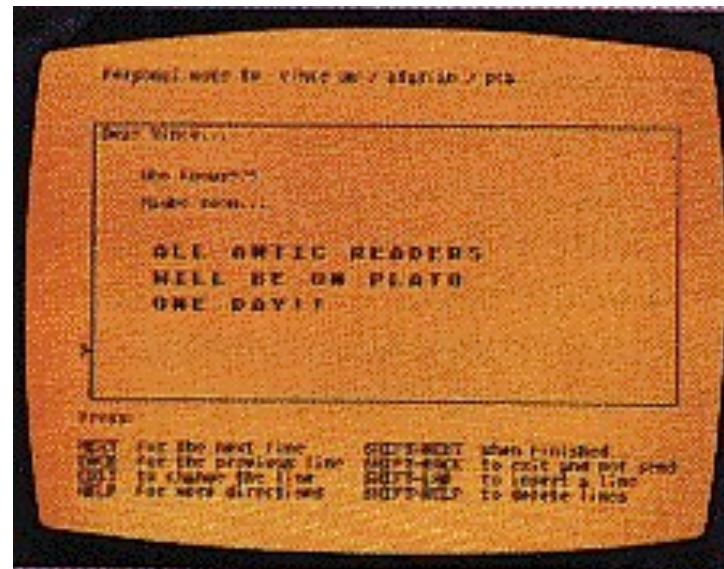
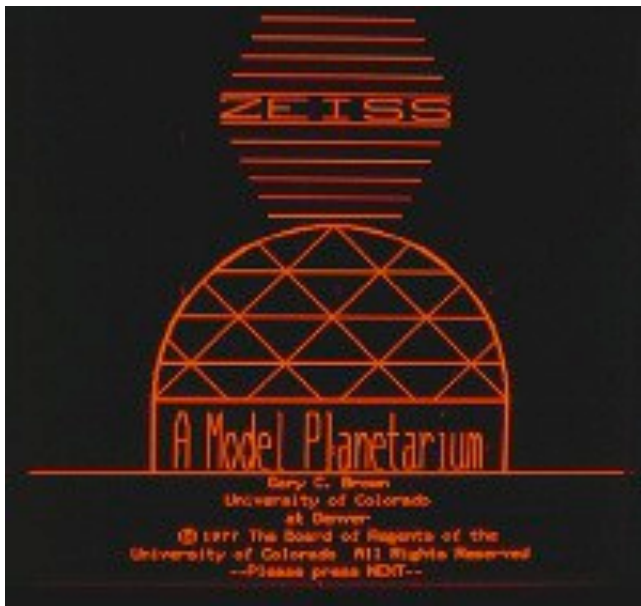
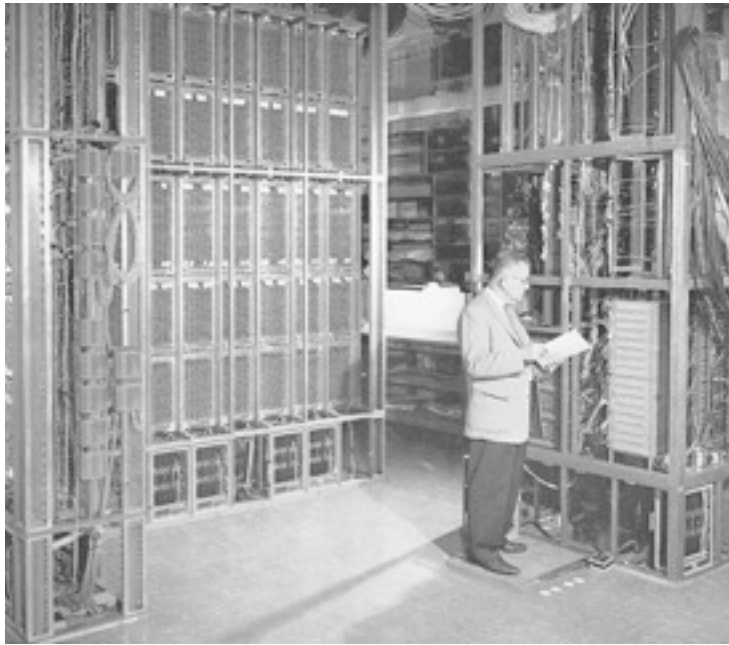
Prof. Dr. Jochen Koubek



# Technikgeschichte

# Online-Community PLATO

## Plato IV ab 1972



# PLATO Homelink

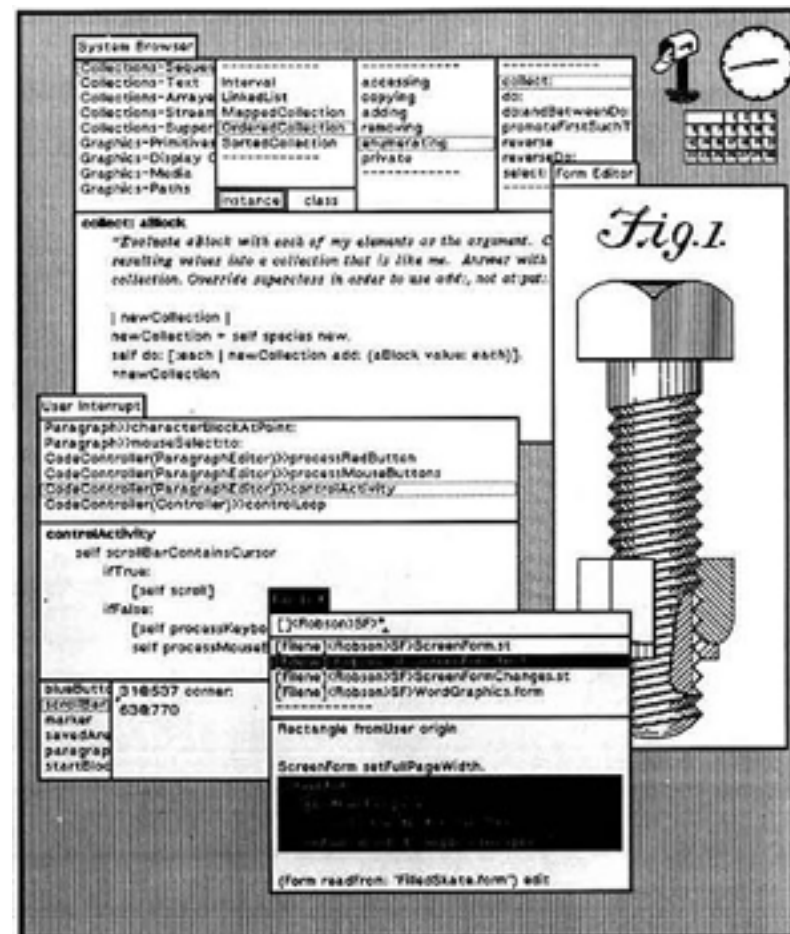
LINK YOUR COMPUTER  
TO AN INTELLIGENT WORLD.



# Xerox Parc



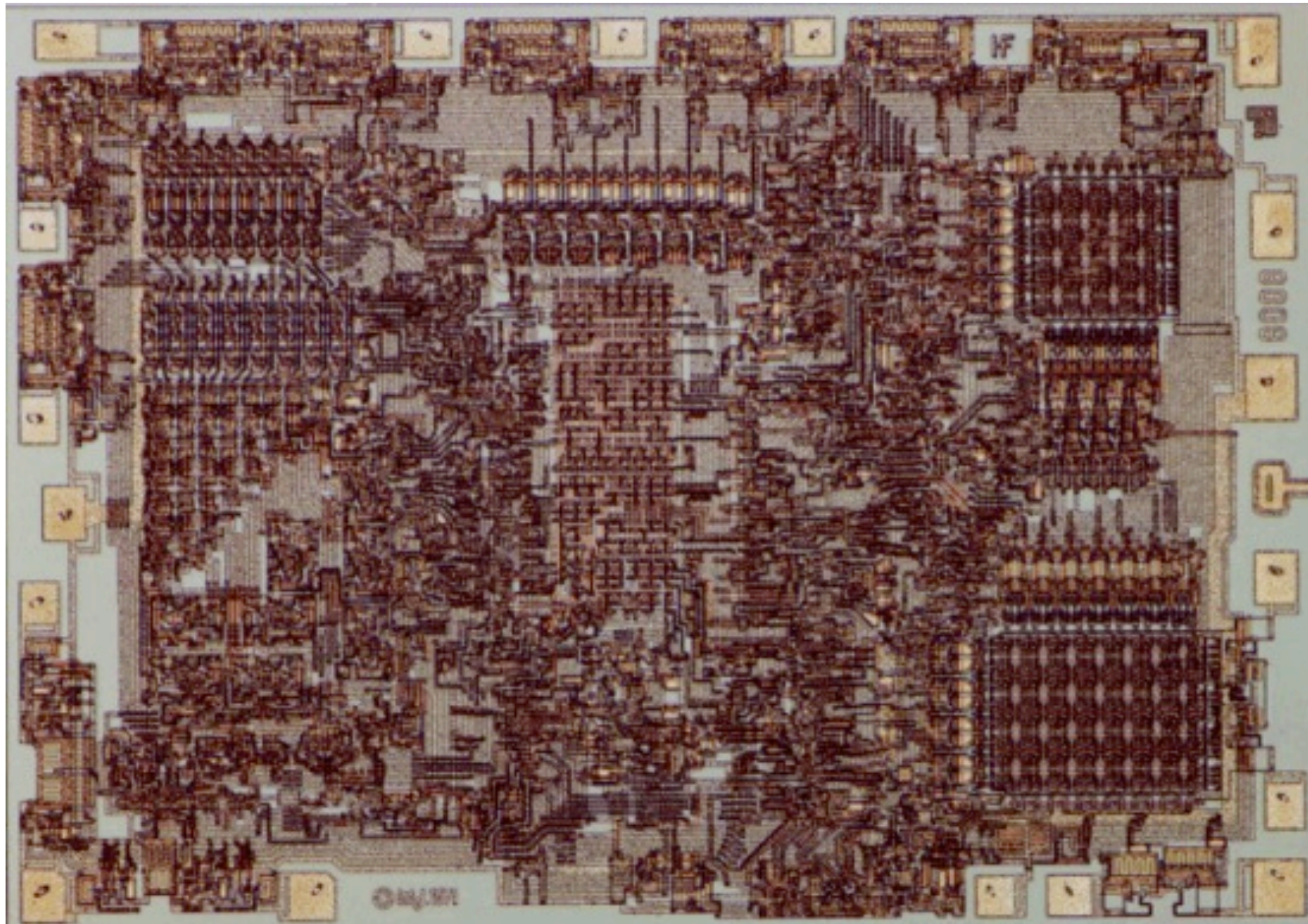
# Xerox Alto



Rastergrafik  
3-Tasten-Maus  
GUI: Windows, Icons,  
Menus, Pointer (WIMP)  
Ethernet  
Email

1973

# Mikroprozessor



Intel: 8008, 1972

HOW TO "READ" FM TUNER SPECIFICATIONS

# Popular Electronics

WORLD'S LARGEST-SELLING ELECTRONICS MAGAZINE JANUARY 1975 / 75¢

**PROJECT BREAKTHROUGH!**  
**World's First Minicomputer Kit to Rival Commercial Models...**  
**"ALTAIR 8800" SAVE OVER \$1000**



**ALSO IN THIS ISSUE:**

- An Under-\$90 Scientific Calculator Project
- CCD's—TV Camera Tube Successor?
- Thyristor-Controlled Photoflashers

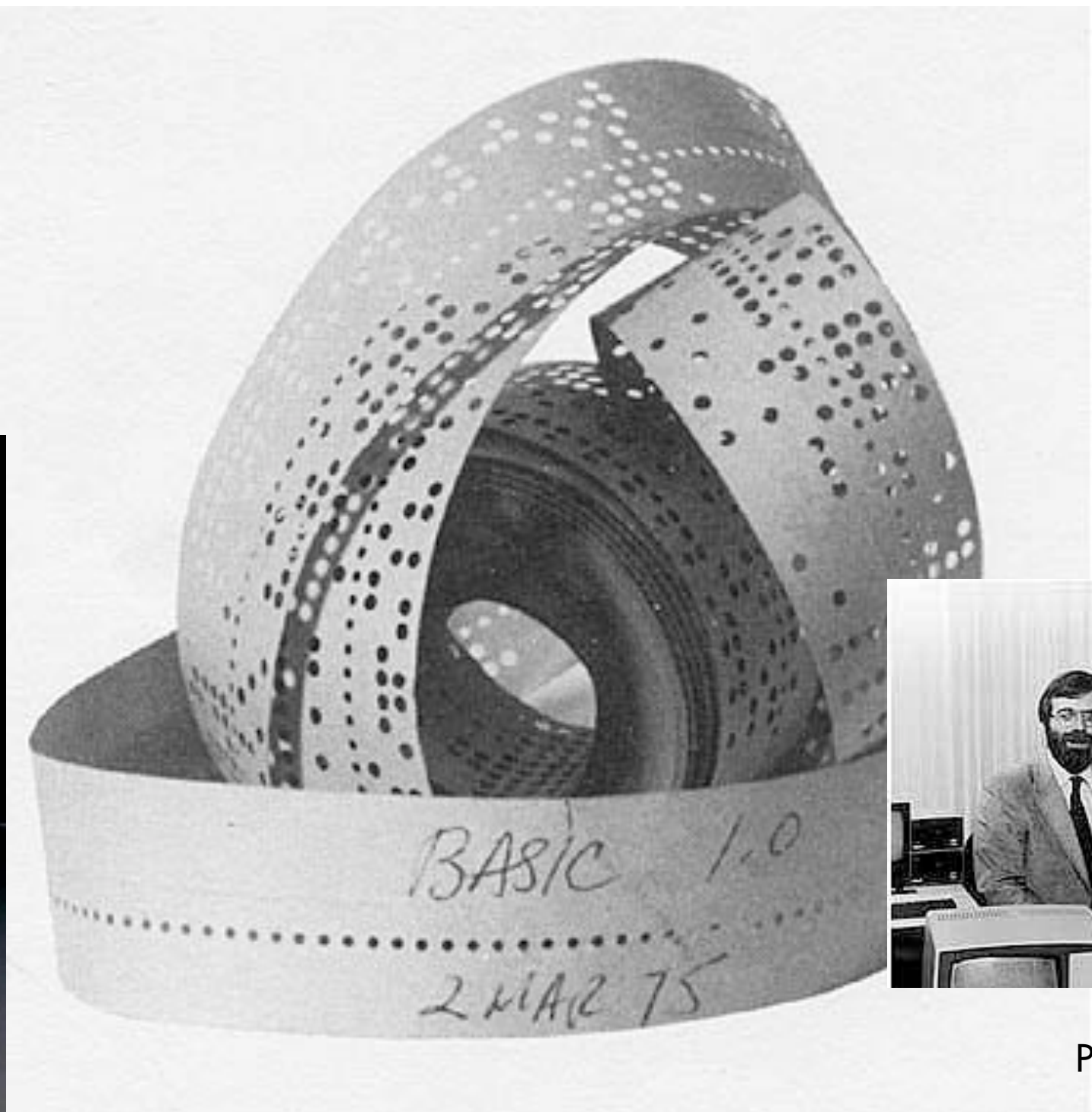
**TEST REPORTS:**

- Technics 200 Speaker System
- Pioneer RT-1011 Open-Reel Recorder
- Tram Diamond-40 CB AM Transceiver
- Edmund Scientific "Kirlian" Photo Kit
- Hewlett-Packard 5381 Frequency Counter



# Altair

## 1974-1975



Ed Roberts, MITS



Paul Allen, Bill Gates



# Apple I - der erste Homecomputer (1976)



## Apple Introduces the First Low Cost Microcomputer System with a Video Terminal and 8K Bytes of RAM on a Single PC Card.

The Apple Computer. A truly complete microcomputer system on a single PC board. Based on the MOS Technology 6502 microprocessor, the Apple also has a built-in video terminal and sockets for 8K bytes of on-board RAM memory. With the addition of a keyboard and video monitor, you'll have an extremely powerful computer system that can be used for anything from developing programs to playing games or running BASIC.

Combining the computer, video terminal and dynamic memory on a single board has resulted in a large reduction in chip count, which means more reliability and lowered cost. Since the Apple comes fully assembled, tested & burned-in and has a complete power supply on-board, initial set-up is essentially "hassle free" and you can be running within minutes. At \$666.66 (including 4K bytes RAM!) it opens many new possibilities for users and systems manufacturers.

### You Don't Need an Expensive Teletype.

Using the built-in video terminal and keyboard interface, you avoid all the expense, noise and maintenance associated with a teletype. And the Apple video terminal is six times faster than a teletype, which means more throughput and less waiting. The Apple connects directly to a video monitor (or home TV with an inexpensive RF modulator) and displays 960 easy to read characters in 24 rows of 40 characters per line with automatic scrolling. The video display section contains its own 1K bytes of memory, so all the RAM memory is available for user programs. And the

Keyboard Interface lets you use almost any ASCII-encoded keyboard. The Apple Computer makes it possible for many people with limited budgets to step up to a video terminal as an I/O device for their computer.

### No Mere Switches, No Mere Lights.

Compared to switches and LED's, a video terminal can display vast amounts of information simultaneously. The Apple video terminal can display the contents of 192 memory locations at once on the screen. And the firmware in PROMS enables you to enter, display and debug programs (all in hex) from the keyboard, rendering a front panel unnecessary. The firmware also allows your programs to print characters on the display, and since you'll be looking at letters and numbers instead of just LED's, the door is open to all kinds of alphanumeric software (i.e., Games and BASIC).

### 8K Bytes RAM in 16 Chips!

The Apple Computer uses the new 16-pin 4K dynamic memory chips. They are faster and take 1/4 the space and power of over the low power 2102's (the memory chip that everyone else uses). That means 8K bytes in sixteen chips. It also means no more 28 amp power supplies. The system is fully expandable to 65K via an edge connector which carries both the address and data busses, power supplies and all timing signals. All dynamic memory refreshing for both on and off-board memory is done automatically. Also, the Apple Computer can be upgraded to use the 16K chips when they become avail-

able. That's 32K bytes on-board RAM in 16 IC's—the equivalent of 256 2102's!

### A Little Cassette Board That Works!

Unlike many other cassette boards on the marketplace, ours works every time. It plugs directly into the upright connector on the main board and stands only 2" tall. And since it is very fast (1500 bits per second), you can read or write 4K bytes in about 20 seconds. All timing is done in software, which results in crystal-controlled accuracy and uniformity from unit to unit.

Unlike some other cassette interfaces which require an expensive tape recorder, the Apple Cassette Interface works reliably with almost any audio-grade cassette recorder.

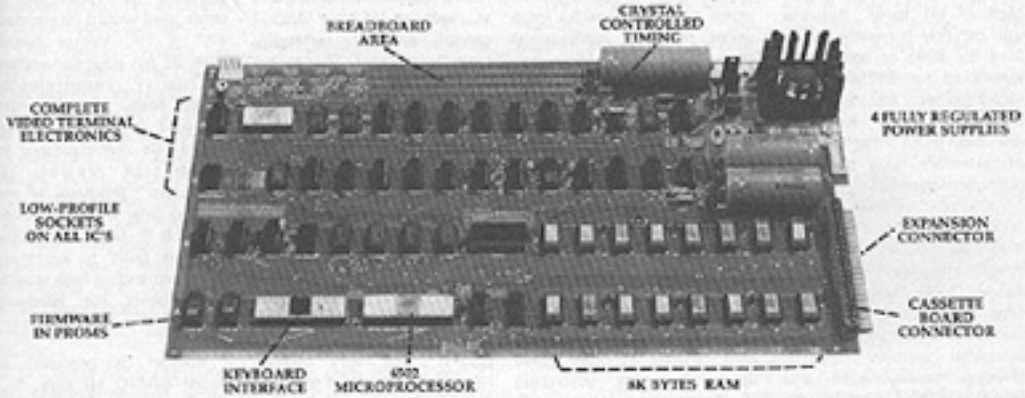
### Software:

A tape of APPLE BASIC is included free with the Cassette Interface. Apple Basic features immediate error messages and fast execution, and lets you program in a higher level language immediately and without added cost. Also available now are a dis-assembler and many games, with many software packages, (including a macro assembler) in the works. And since our philosophy is to provide software for our machines free or at minimal cost, you won't be continually paying for access to this growing software library.

The Apple Computer is in stock at almost all major computer stores. (If your local computer store doesn't carry our products, encourage them or write us direct.) Dealer inquiries invited.

Byte into an Apple ..... \$666.66\*

\*includes 4K bytes RAM



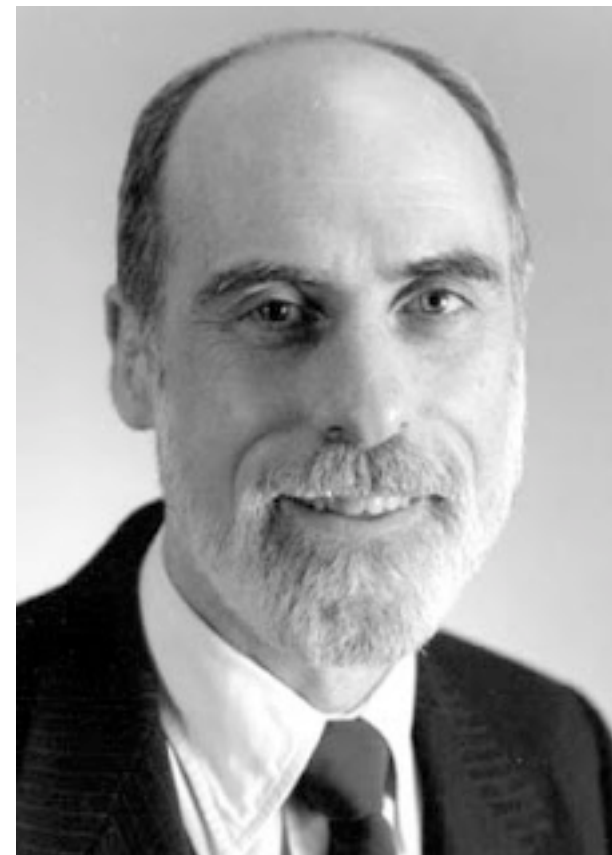
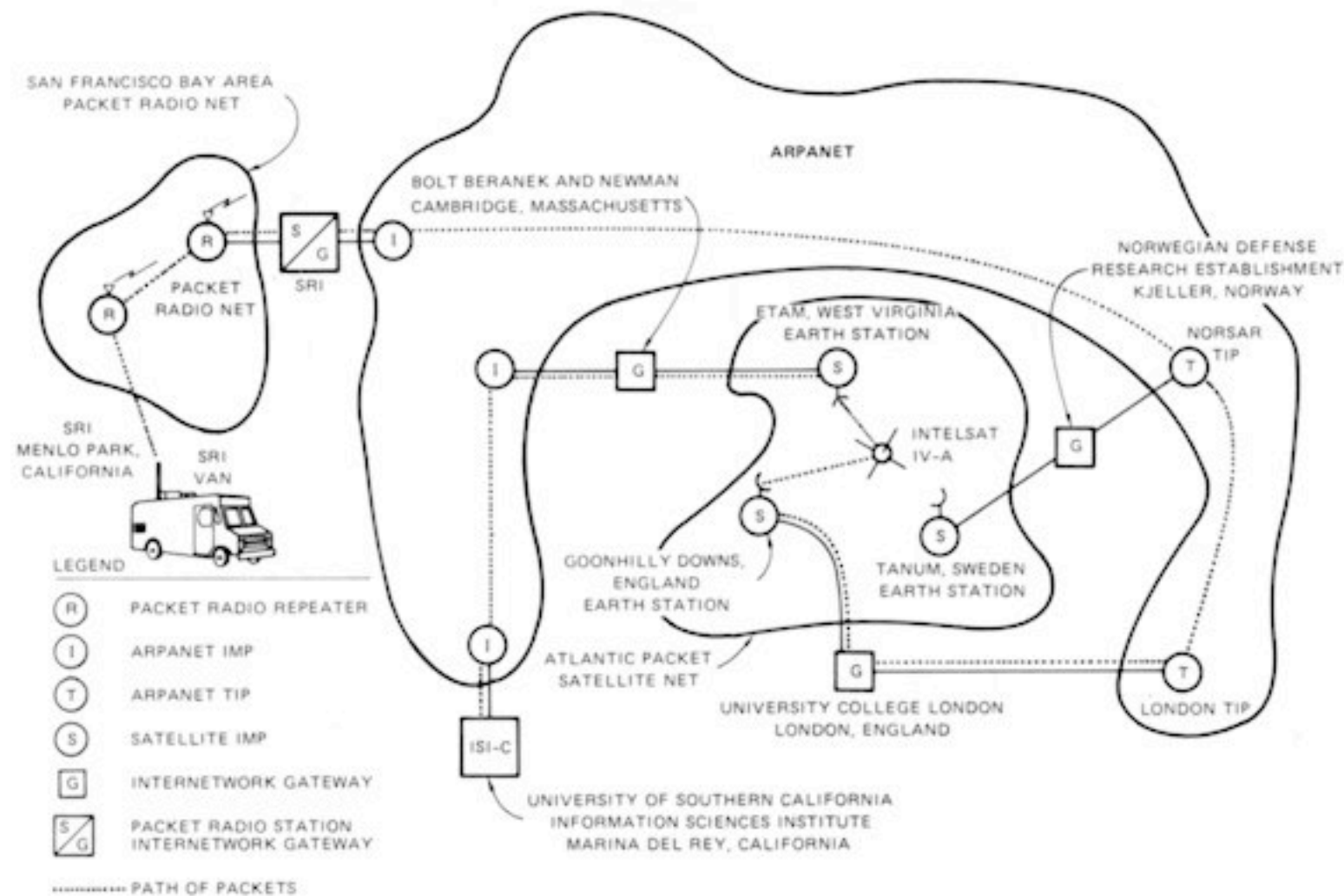
APPLE Computer Company • 770 Welch Rd., Palo Alto, CA 94304 • (415) 326-4248

# Apple II 1977



# TCP/IP

A Protocol For Packet Network Intercommunication, 1974

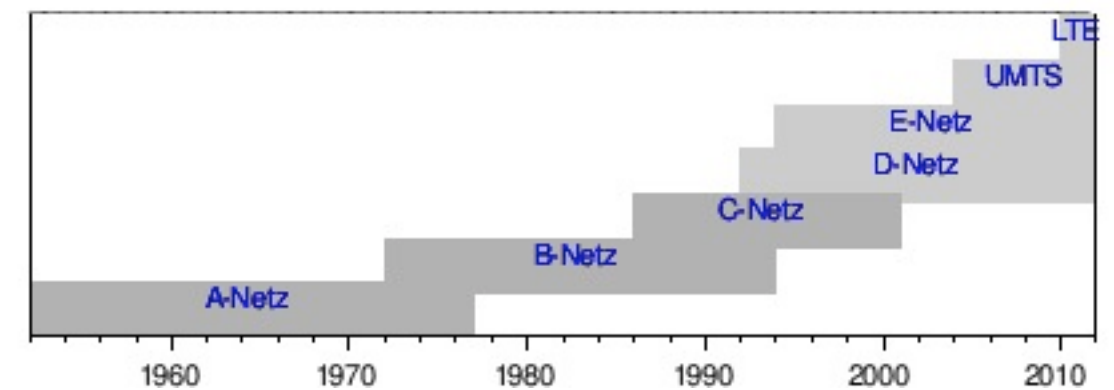
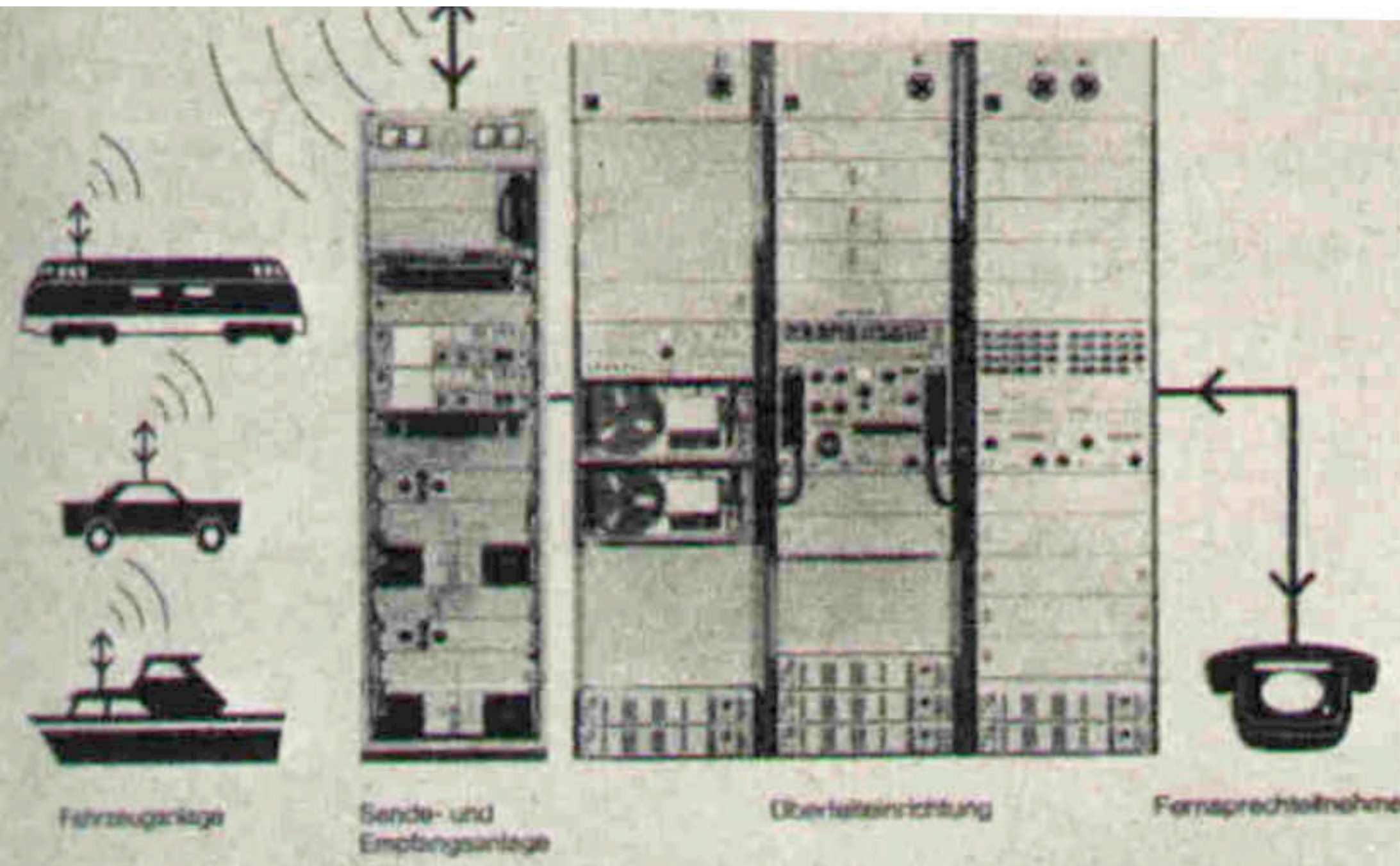


Vinton Cerf



Bob Kahn

# Mobiltelefon



B-Netz, 1972-1994

# Kulturgeschichte



**Kawaii**  
»niedlich, süß«

Sanrio: Hello Kitty (ハローキティ),  
ab 1974

# Sentai

»Einsatztruppe«

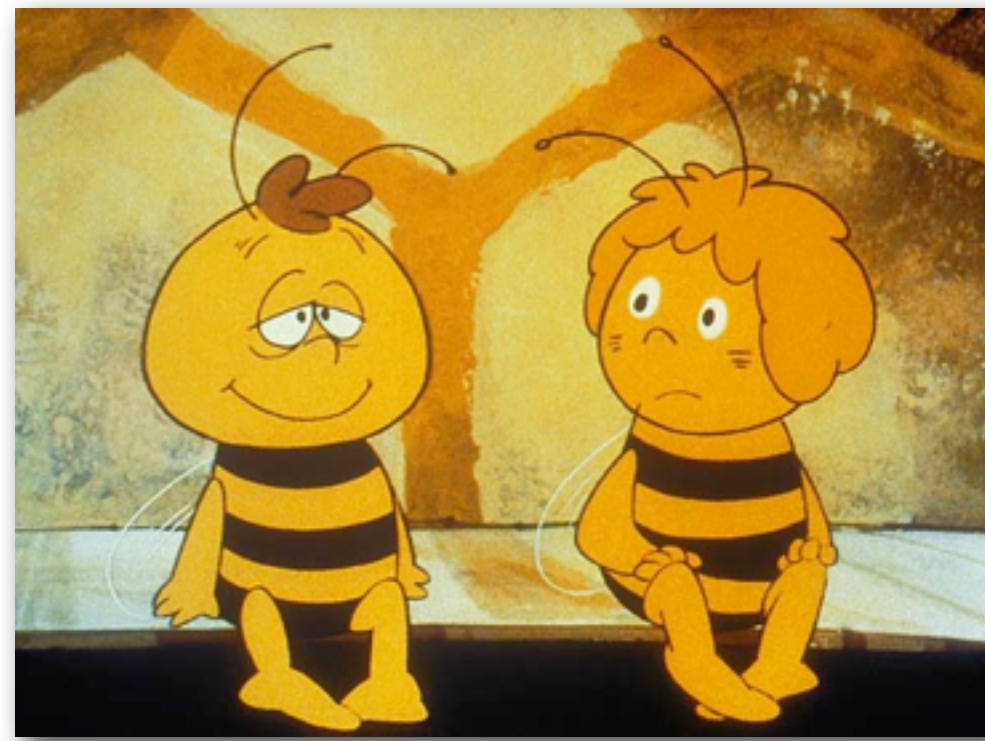


Gatchaman, ab 1972

# Deutsch-japanische Koproduktionen



Heidi 1974



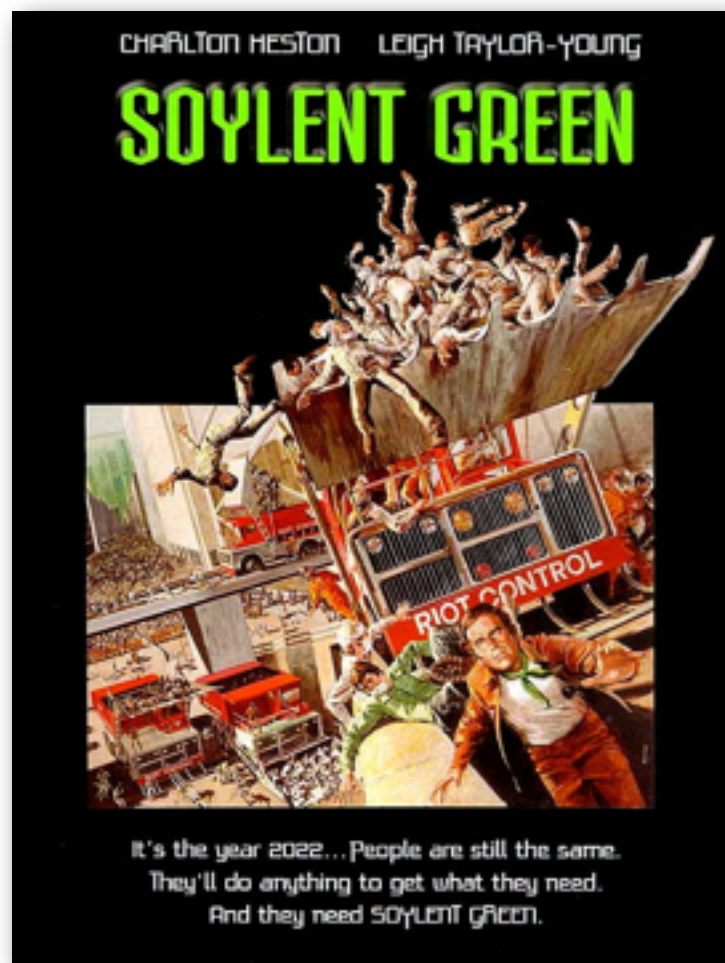
Biene Maja 1976



Pinocchio 1976



# Science Fiction



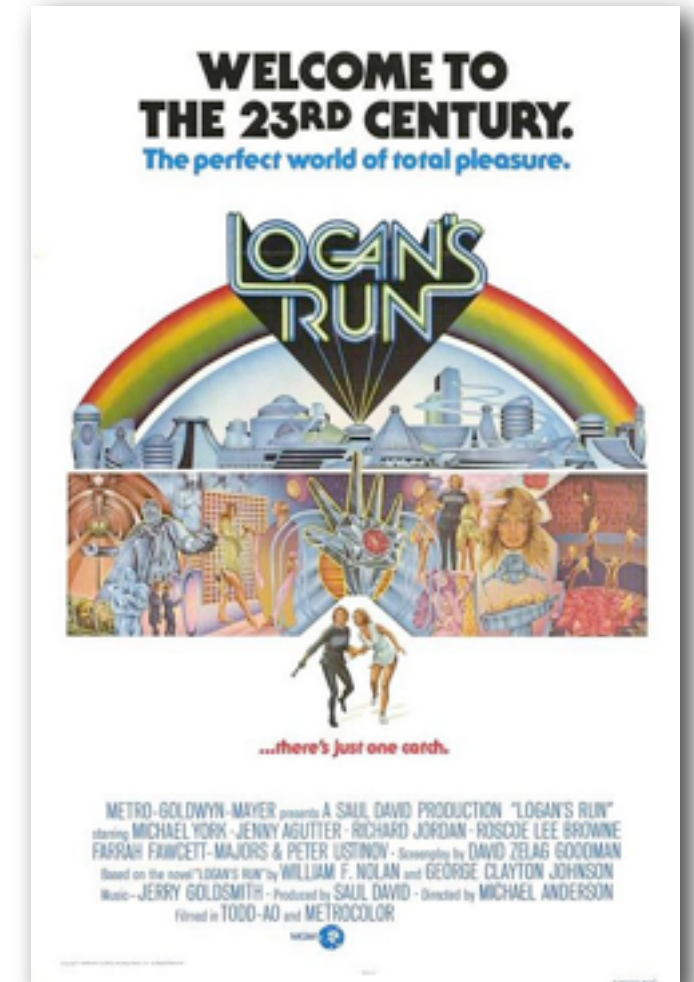
1973



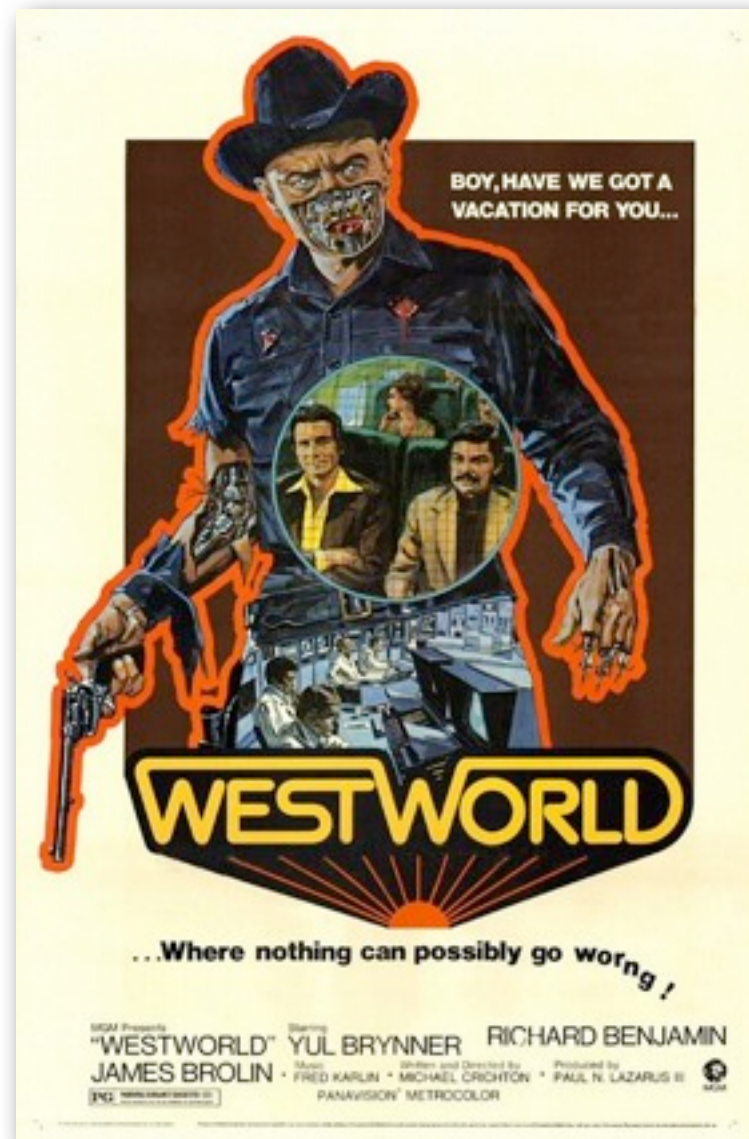
1975



1975

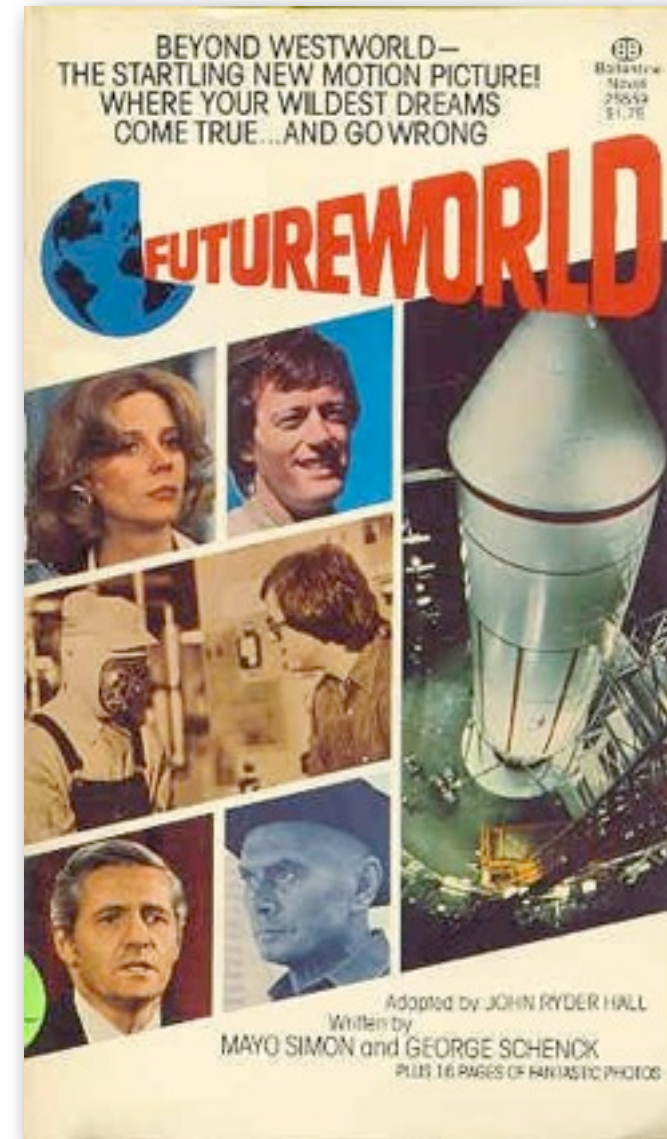


1976



Westworld (1973)

[https://www.youtube.com/watch?v=3UPXqL\\_Vm5M](https://www.youtube.com/watch?v=3UPXqL_Vm5M)



Futureworld (1976)

<https://www.youtube.com/watch?v=T5seU-5U0ms>

<https://www.youtube.com/watch?v=QfRAfsK5cvU>

# Horror



The Texas Chain Saw Massacre, 1974

# Spielegeschichte

# Odyssee zum Spielen und Lernen

Das elektronische Fernsehspiel für die ganze Familie



## Odyssee bringt das vierte Programm auf den Bildschirm.

### Sie können dabei aktiv mitmachen.

Durch diese neue Idee wird Ihr Fernsehgerät zum Fußballstadion, zum Tennisplatz, zum Schießstand oder gar zum Weltraum. Auf Ihrem Bildschirm-Spielfeld agieren elektronische Spielfiguren. Sie schlagen – natürlich elektronisch – Bälle, schießen Torpedos ab, rasen eine Skiabfahrt hinab.

Das Odyssee-Spielzentrum wird einfach an die Antennenbuchse Ihres Fernsehgerätes angeschlossen.

Und damit können Sie das elektronische Drum und Dran vergessen. Auf dem Bildschirm erscheinen zwei kleine leuchtende Quadrate. Sie stellen die Spielfiguren dar und werden von zwei Spielpulten aus bewegt. Nach allen Richtungen, schnell oder langsam – ganz nach Ihrer individuellen Spielanlage. Nach dem Druck auf die Start-Taste erscheint der Ball. Als leuchtender Punkt fliegt er von einer Spielhälfte zur anderen und kann natürlich auch in Flugrichtung und Geschwindigkeit verändert werden.

Mit den Knöpfen am Spielpult lenken Sie „Ihre“ Spielfigur und versuchen, den heranfliegenden Ball zu erreichen. Er wird dadurch wieder „zurückgeschlagen“ und geht nicht ins „Aus“.

### Konzentration und Geschicklichkeit entscheiden das Spiel

Abb. links Das „Gehirn“ des Odyssee-Spieles befindet sich im Spielzentrum (Mitte), an das die beiden Spielpulte angeschlossen werden

Abb. rechts Zum Odyssee-Spiel gehört alles, was für die einzelnen Spiele gebraucht wird: Farbige Bildschirm-Folien für verschiedene Bildröhregrößen von 43 bis 63 cm (mit den jeweils erforderlichen Spielfeld-Markierungen), Spielkarten, Spielchips, ein 20seitiges Heft mit den genauen Spielregeln, Anschlußkabel und vieles mehr.

Jetzt durch Großserienfertigung anstatt DM 398.- **298.-**



Ralph Baer, 1972 (Prototyp 1967)

<https://www.youtube.com/watch?v=0MnRkPvljKE>

THE NEWEST <sup>2</sup> PLAYER  
VIDEO SKILL GAME

# PONG

from ATARI CORPORATION  
SYZYGY ENGINEERED

The Team That Pioneered Video Technology

## FEATURES

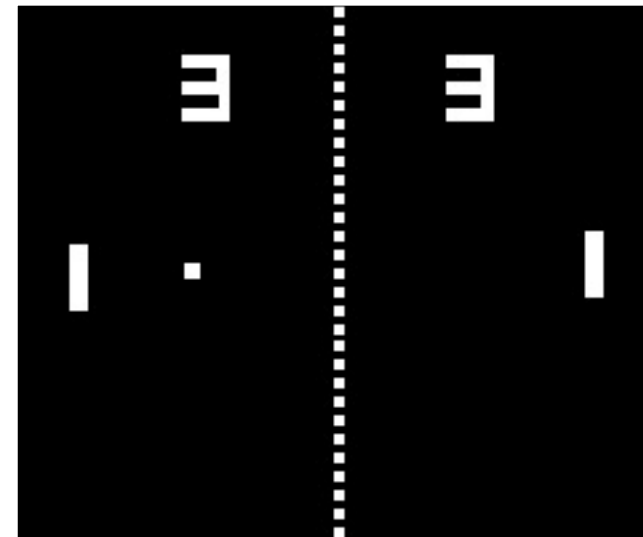
- STRIKING Attract Mode
- Ball Serves Automatically
- Realistic Sounds of Ball Bouncing, Striking Paddle
- Simple to Operate Controls
- ALL SOLID STATE TV and Components for Long, Rugged Life
- ONE YEAR COMPUTER WARRANTY
- Proven HIGH PROFITS in Location After Location
- Low Key Cabinet, Suitable for Sophisticated Locations
- 25¢ per play



THIS GAME IS AVAILABLE FROM YOUR LOCAL DISTRIBUTOR

Manufactured by  
ATARI, INC.  
2962 SCOTT BLVD.  
SANTA CLARA, CA.  
95050

Maximum Dimensions:  
WIDTH - 26"  
HEIGHT - 50"  
DEPTH - 24"  
SHIPPING WEIGHT:  
150 Lb.



Nolan Bushnell,  
1972



SS Billiards, south of downtown Hopkins Minnesota, in 1973

# TABLE TENNIS



Harvest Gold  
Solid White  
Honey

Solid Beige  
Adobe Gold  
Bright Russet

# Nutting Associates

1973



# Pong-Klone

Konsolen-Crash 1977



Universum TV Multi-Spiel 2006, 1978



Telstar 1976



Telstar Arcade 1977



Nintendo Color TV Game 1977

# Hunt the Wumpus

```
You are in room 13 of the cave, and have 5 arrows left.  
There are tunnels to rooms 5, 11, and 13.  
Move or shoot? (m-s) s14  
  
*thunk* The arrow can't find a way from 13 to 14 and flys randomly  
into room 13!  
  
*Thwack!* A sudden piercing feeling informs you that the ricochet of  
your wild arrow has resulted in it wedging in your side, causing  
extreme agony. The evil Wumpus, with its psychic powers, realizes  
this and immediately rushes to your side, not to help, alas, but to  
EAT YOU!  
  
(*CHOMP*)  
  
Care to play another game? (y-n)
```

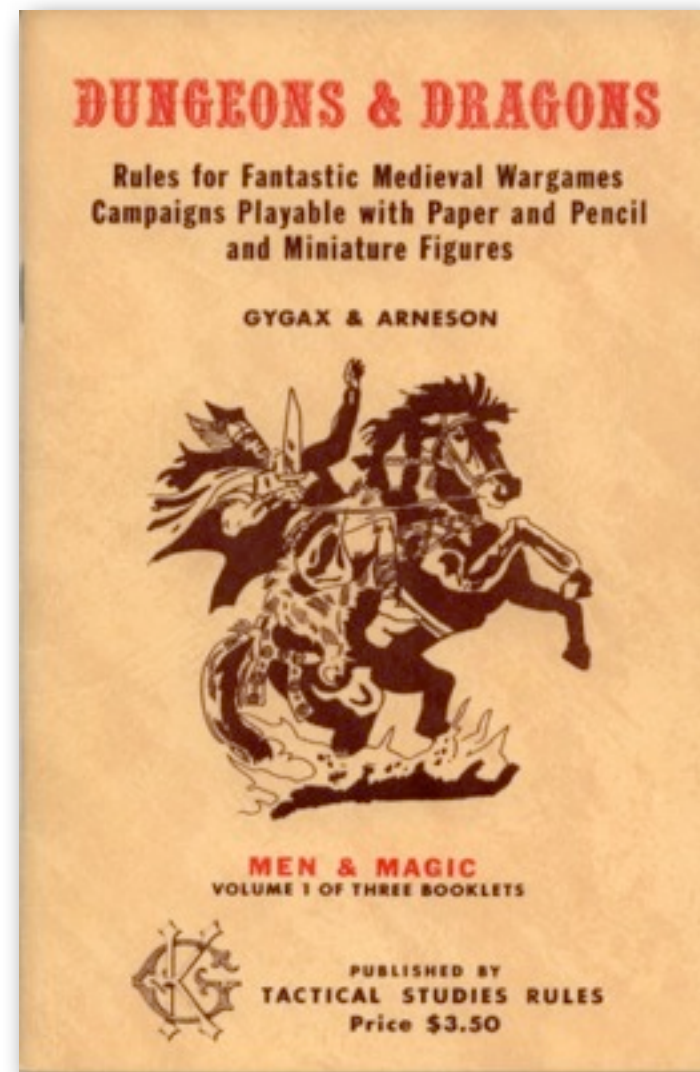
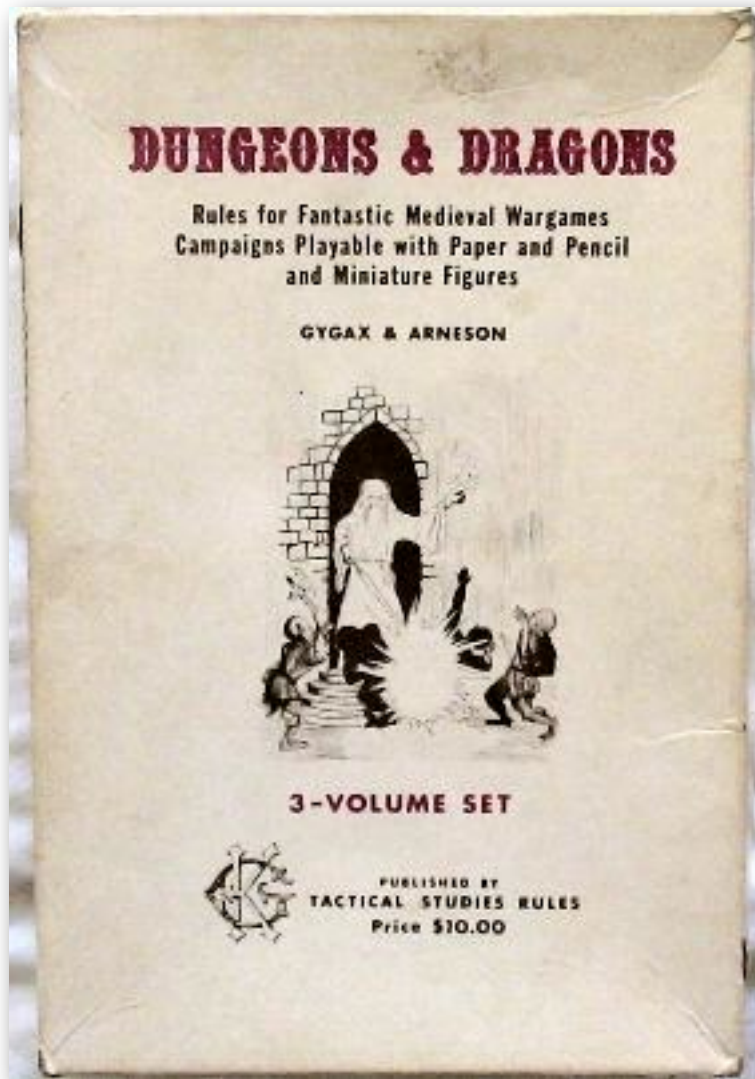
Gregory Yob, 1972



## Mazewar, 1974

<http://www.digibarn.com/collections/games/xerox-maze-war/movies/maze-on-alto-fastart.mov>

# Dungeons & Dragons



Gary Gygax; Dave Arneson  
1974

<http://www.acaeum.com/ddindexes/setpages/original.html>

A Dungeons and Dragons game pitting the players against the evil forces lurking within the dark and dangerous Dungeons. The Object: Seek out the Orb and Grail, and enter the Hall of Fame.

3789147 Dungeon Trips Thus Far

Adventurers Retired to HOF: 125

The Dungeon Hall of Fame		
Name	Level	Order
Martin Peloquin	151	Oaken Staff
Steve Gordon md	112	Unicorn
No WMD -spidey	219	White Lady
G. Bush	116	Unicorn
woof	217	Titan Lords
Zen	122	Unicorn
Taylor	179	Unicorn
S Huston	154	Unicorn
S Huston	169	Unicorn
mr meat	249	Renegades

Written by: Flint Pellett & Dirk Pellett  
Originally by: Gary Whisenhunt & Ray Wood

Press NEXT to enter The Dungeons, or:  
DATA: notes, HELP: help, Shift-BACK: leave.

dnd, 1974

# PLATO



SHIP  
L1-Not much, how about you?  
D1-  
Mag = 18  
cruising= 1.000  
θ = 8.00°  
φ = 45.00°  
x = 77265  
y = 24884  
z = 53838

Spasim, 1974 (HELP)



Aura  
The Elf  
STR-- 38 Charmed:  
IQ -- 38 Dragon 323/372  
WIS-- 29  
DEX-- 38  
END-- 38  
LEVEL- 372

This Trip:  
Magic-- 11+  
Cleric- 11  
On Level: 1  
Hits-2598/3134  
Gold- 866

\$ 3 in gold!!

+3 +2  
+3 +2  
+3  
of Fear  
Warning  
Sorcery  
Healing  
Wizard's  
of Vision  
3 Holy Water  
3 Healing  
3 Vision  
3 Dragon Cnt  
3 Undead Cnt  
Genie  
of Elixir  
Magic Oil  
See Invis.  
Protect+2  
Power+2  
Regener+3  
Luck+2  
Levitation  
Invisible  
X-Ray Vis.

dnd, 1974

score Lat:68137 Long:162500 1 missiles  
skywolf: fly.

F203b Plasma Fighter

ALTIT	FUEL	SPEED
386	929	248
CLIMB	G-FORCE	
113	8.88	

HEAD 98  
PITCH 28  
ROLL 8

RADAR

Airfight, 1974

City

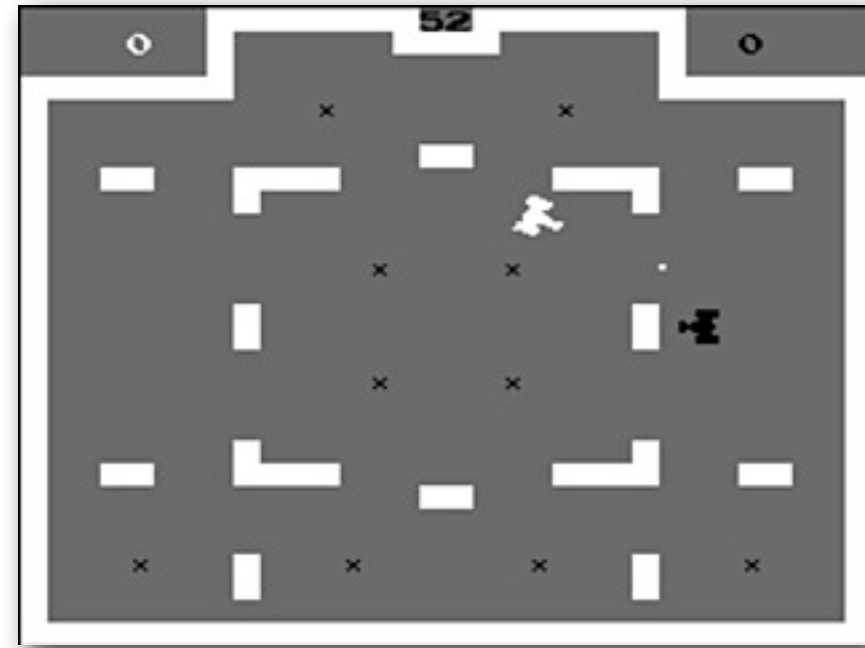
Room N 3,4

You've found the wilderness.  
Press SHIFT-NEXT to enter.

**SPELLS ON**  
Torch  
**WEAPONS/ITEMS**  
**SUPPLIES**  
Food 28 months  
Water 28 months

**CHAR STATS**  
Cunning 12  
Piety 8  
Valor 13  
Wizardry 11  
Vitality 100  
Age 15  
Gold 6913  
Score 37  
Peasant  
**GROUP MEMBERS**  
\*fineous

Moria, 1975



<http://www.youtube.com/watch?v=3OsBUzYBJgU>

Kee Games

Tank, 1974





Atari: Gran Trak 10, 1974

was implemented in C by Jim Gillogly, and expanded  
and moved to the 8080/280 by Walt Bitofsky.

You are standing at the end of a road before a  
small brick building. Around you is a forest. A  
small stream flows out of the building and down a  
gully.

<Hit RETURN to continue>

NO

I don't understand that?

ENTER

You are inside a building, a well house for a large  
spring.

There are some keys on the ground here.

There is a shiny brass lamp nearby.

There is food here.

There is a bottle of water here.

-

Adventure, ab 1975



29884 • \$1.25 • ARCH

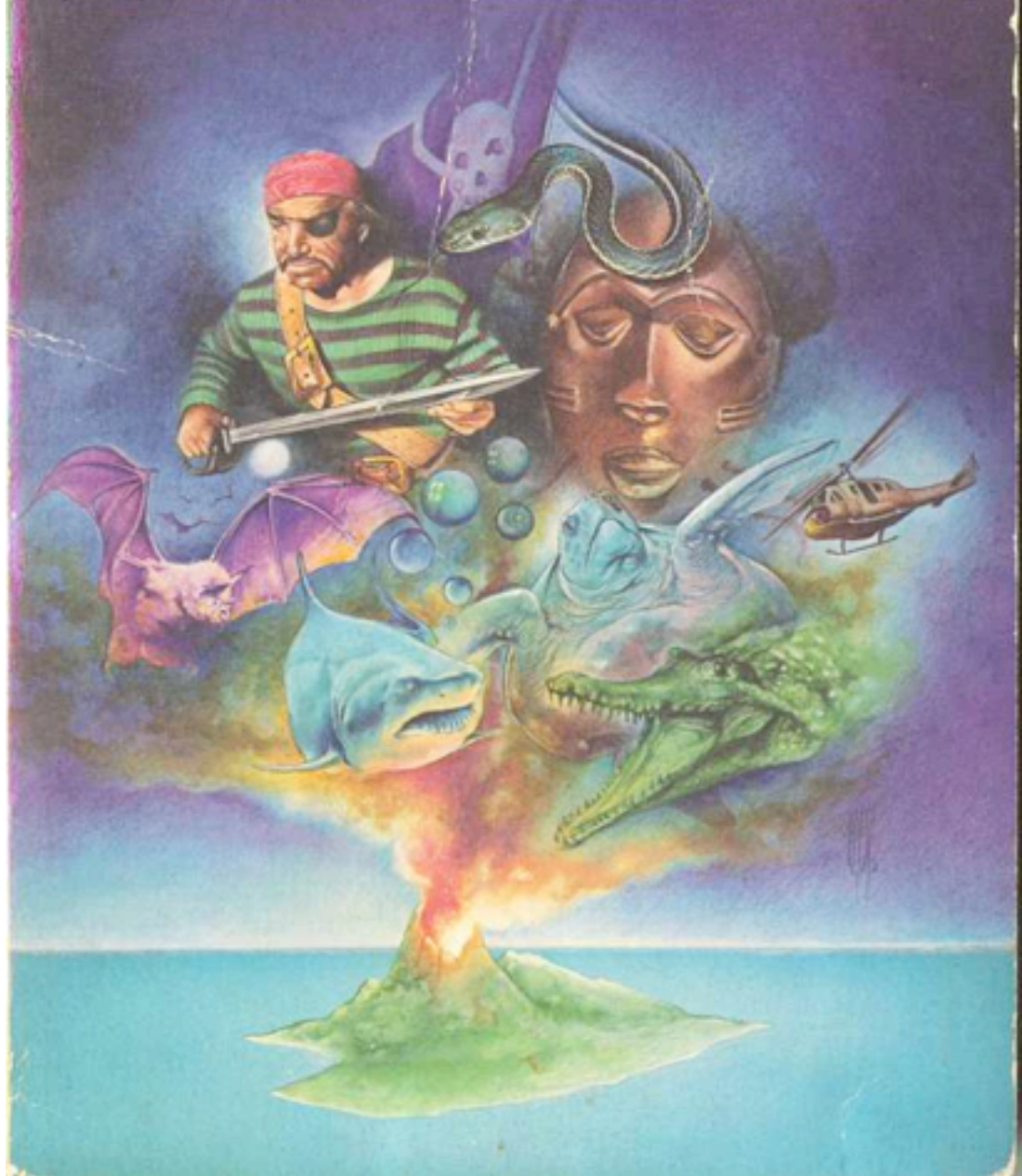


The Adventures of You Series

# Sugarcane Island

by Edward Packard

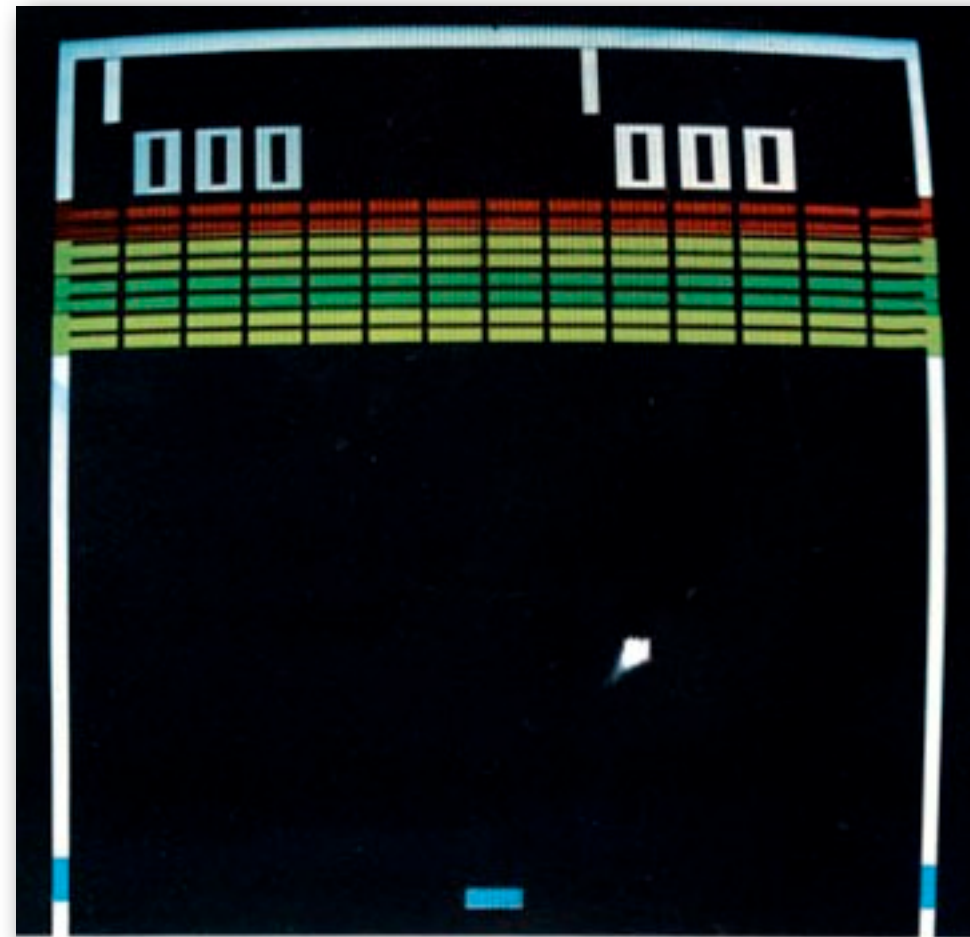
Illustrated by Barbara Carter



# Spielbücher

1976 *The Adventures of You*  
ab 1978 *Choose Your Own Adventure*

# Breakout



Steve Wozniak, 1976

# Portable



1976

<http://www.youtube.com/watch?v=isejBX1Tyjk>



<http://www.youtube.com/watch?v=jNKgpAFOsa0>

Your greatest challenge  
lies ahead—and downwards.



**INFOCOM**

SOFTWARE FOR YOUR  
**ATARI ST SERIES**  
014 0084  
100-022

INTERACTIVE FICTION

FANTASY

STANDARD LEVEL

# Zork I

Infocom: Tim Anderson, Marc Blank, Bruce Daniels,  
Dave Lebling, 1977