Imagine being Walter Mitty, except with fantasies that don't always go the way you want. No, imagine being a character in a novel, or taking a wrong turn while looking for your theater seat and finding yourself on stage. Or imagine that you've never heard of chess, but are playing a grand master who won't tell you what you can but only what you can't do. Adventure games—some of the most popular and addictive computer programs—are like that.

Sound like fun? Oddly enough, it is. Adventures are very different from most people's notion of "computer games"—home computer clones of arcade video game hits like Pac-Man and Defender—but they rival the shoot-'em-ups as software best-sellers. Last June, the Softsel distribution chain's figures showed Infocom's Zork I and Deadline in third and fourth place (behind Zaxxon and Frogger) on the game list. Five of the top 10 games, in fact, were adventures. Fantasy games are adventures' cousins; the fantasy Wizardry is solidly in Softalk magazine's Top 10, close behind VisiCalc and Home Accountant and ahead of Screen Writer II and PFS: Report, all best-selling business programs.

What makes adventures appealing (and often frustrating) is that they're interactive—you don't play an adventure, you participate in it. In effect, you talk to an adventure program: you type words and press the ENTER or RETURN key, rather than moving a joystick and pressing the FIRE button. Space Invaders will continue to send aliens at you in the same (admittedly complex) pattern until you're eventually overwhelmed; adventures will present you with different situations depending on your responses. The result calls for logic and problem solving instead of hand-eye coordina-

tion. Game players live by their reflexes; adventurers live by their wits. Game players say "Yikes!"; adventurers say "Hmmm."

ESCAPE INSTRUCTIONS

Basically, an adventure puts you in a strange and usually dangerous environment and assigns you a task: collect the treasure, solve the murder, defeat the dragon. Exactly how to do that, or how to stay alive in the meantime, is left up to you. To succeed you must figure out what you want to do, and how to do it. The latter involves giving instructions to the computer using a vocabulary and syntax it can understand.

A typical adventure might begin by displaying, as text on the screen, the message, "You are in a dungeon cell. There is a door to the east and a crawway to the south." What you want to do, presumably, is get out of the cell. Since the fundamental adventure command is a two-word (verb and noun) sentence, you might type LEAVE CELL (or GO EAST) and press the ENTER key. In that case, the program might give the fundamental adventure response: "You can't do that."

Are you frustrated? Not until you've tried 20 or 30 synonymous phrases and have struck out. Your best bet is to EXAMINE DOOR ("Examine" is the most useful verb in the adventure dictionary) and read the additional information, "The door is closed and locked."

BREAK DOOR. "You can't do that."

KICK DOOR. "You hurt your foot, but kicking the door has no effect."

GET HINGE. "I don't know the word hinge."

The word isn't in the program's vocabulary. Either it does know a synonym, or the concept is irrelevant and you're on the wrong track.
WHY DO VIDEO GAME PLAYERS SAY "YIKES" AND ADVENTURE GAME PLAYERS SAY "HAAAAAA"? BECAUSE ADVENTURE/FANTASY GAMES MAKE YOU THINK, WHILE YOU'RE FREE TO DREAM.

There is no combination of words that will let you take the door off its hinges.

UNLOCK DOOR. "You don't have the key."

Aha! Most adventures always know what you're carrying—INVENTORY is a helpful command—and, though your pockets are empty at the moment, you know there is a key somewhere.

GET KEY. "I don't see it here." If it were there, it would have been in the opening description.

GO SOUTH. "You are in a crawly way south of the cell. There is a key here."

GET KEY. "Okay." (If you typed INVENTORY now, it would say "you are carrying: a key.")

GO NORTH. "You are in a dungeon cell."

UNLOCK DOOR. "The door is unlocked."

GO EAST. "The door is closed." Adventures are maddeningly methodical.

OPEN DOOR. "The door opens easily."

GO EAST. "You are in a courtyard. There is a door to the west and a road heading north."

Going west would, of course, put you back in the cell.

This would be only the beginning of the adventure, and an elementary one at that. Many adventures accept complete sentences rather than restricting you to two-word patois; nearly all take "E" or "S" as shorthand for GO EAST or GO SOUTH. (Some read only the left-most characters of each word. Experienced space travelers in Avalon Hill's G.F.S. Sorceress, confronted with a metallic hatch, briskly type EXAMINE METAL HATCH, meaning, "Examine Metallic Hatch.")

Clearly, interaction challenges programmers as well as players. An adventure game must be prepared for any of many possible instructions, while an arcade-type game might recognize only MOVE LEFT, MOVE RIGHT, and FIRE. Such sophistication has its price, both in terms of game cost ($20 to $100 apiece) and computer memory. A fair version of Lunar Lander will fit in a 5K VIC-20, but most adventures require a 32K or larger system with disk drive—a machine such as an Apple II or Ile, TRS-80 Model III or IV, IBM PC, or Commodore 64. There are, however, some 16K cassette adventures, and some of genre pioneer Scott Adams's original stories have been condensed onto VIC-20 cartridges.

FROM D & D TO PDP

Adventures and fantasy games trace their pre-electronic origins to Dungeons and Dragons, the role-playing board game in which several players explore a world created by, and face combat under rules known only to, a combined author and referee known as the dungeon master. Within the dungeon master's framework, mathematics and probability—involving, say, a character's "strength" or "intelligence" points, combined with some dice rolling for luck—determine the outcome of various moves: "All right, you chose to use your axe instead of a sword and killed the troll," or "Sorry, you're in front of the combination lock but you can't figure it out."

The first to assign the master's role to a computer were Will Crowther and Don Woods, who in the mid-70s wrote a game called Colossal Caves (or, more popularly, Adventure) on a DEC PDP-11 minicomputer at Stanford University. A few years later (1978), Scott Adams of Orlando, Florida, wrote the first microcomputer adventure on a TRS-80 Model I. Adams's Adventureland, inspired by, but not a direct translation of, the Crowther and Woods archetype, started the adventure explosion.

A GAME OF PATIENCE

Most adventures take 30 to 40 hours to solve. (Mercifully, that's not at one sitting; you can save a game in progress on a floppy disk and pick up later where you left off.) In addition to trial and error, a willingness to second-guess insidious programmers, and perhaps a dictionary of synonyms, two skills are essential for would-be players.

The first is mapping—adventuredom's word for taking notes, sketching a map of each location you visit. East of the Druid's chamber, for instance, you might find a treasure room; north of that, an unfriendly wolves' lair that you'll want to avoid on future visits to the treasure room. Combined with every adventure's Rule #1, "Examine everything"—there may be a magic scroll on the dusty table; the pistol you found may not be loaded—maps are indispensable. They help even in the genre's worst cliché, the maze (or forest or desert), where moves in any direction bring the same mocking information, "You are in a maze."

The other prerequisite is a taste for wordplay, or at least a tolerance for the programmer's warped sense of humor. The original Adventure, after you blunder into its maze—"You are in a maze of twisty little passages"—occasionally sends a different message to cheer you up: "You are in a twisty maze of little passages," or "You are in a little maze of twisty passages." The arrangement of words in these sentences compile a code; figure out the code and you'll know exactly where in the maze you stand.

Other codes are sprinkled throughout adventures. There's a magic lamp in Adams's Adventureland: type DUMP LAMP and a genie appears with a diamond ring. Type it again and the genie gives you a diamond bracelet. Try a third time and the genie, growling "Boy, are..."
you greedy." snatches back his treasures with an angry roar of thunder.

Even worse is Subterranean Encounter, a TRS-80 adventure from Toucan Software. After turning north at the fork in the road, you meet an unfriendly hermit who will invariably strain you to death—unless, showing an adventurer's sense of the surreal, you've typed EXAMINE FORK and TAKE FORK. The fork in the road, you see, was a dinner fork, suitable for stabbing hermits.

**READING VS. WATCHING**

Adventure, if not adventure puns, can also be transmitted visually. Thousands of puzzle buffs take their adventures straight—that is, with only maps and the mind's eye to illustrate scenes described in text on the computer screen—but by the time adventures reached home computers, with Apple and Atari high-resolution graphics, it was inevitable that some would add pictures to prose. Many current best-sellers display each "room" (adventuredom's term for any location, whether a closet or a swamp, church or barroom) and its contents, giving only a short caption and space for the player's command.

In the choice between text and graphics adventures, graphics fans point to impressive color illustrations and purists retort that thinking people's books don't have pictures in them. They might also add that graphics slow down play a bit; you must wait several seconds for the program to draw each room, even if it's one you've seen a dozen times.

The real decision for the game designer involves allocating memory space. As Robert Woodhead, coprogrammer of Wizardry puts it, "There's an old saying that a picture is worth a thousand words. Unfortunately, on an Apple it takes about 1,000 bytes." In other words, graphics, while adding to an adventure's appeal, take RAM and disk space that could be used for trickier puzzles.

**SWORDS AND SPELLS**

A middle road between graphics and text, and one which stays the closest to the Dungeons and Dragons spirit, is that of fantasy games, which send one or more players wandering through a treasure- and monster-filled multilevel labyrinth.

Fantasies' graphics—usually a sort of overview or "You are here" map—are more modest than illustrated adventures, and players are limited to a handful of legal moves rather than having a wide range of options under an adventure vocabulary. The simplest fantasies might be compared to arcade games, with cursor keys replacing a joystick, plus a few buttons for fighting, picking up or dropping objects, and occasionally casting spells.

The difference, or advantage, is that fantasy game characters change, gaining strength or experience or wisdom as the game progresses. Your Level 1 warrior, encountering a couple of skeletons in a dusty cellar, is given the choice of fight or flight; choosing to fight, after a few turns' worth of swings and misses on both sides, you may defeat the skeletons and thereby qualify for Level 2, which means thicker armor and better odds in your next encounter. After a while, you'll be either dead or formidable—Level 12, say—fighting machine, sweeping up treasures and tackling monsters who grow ever fiercer as you proceed.

(Should you finally retire undefeated, as a Level 27 warrior with 5 million experience points and enough vigor to shrug off an axe blow, several companies offer sequels that load that character from your original game disk and put him into an even tougher neighborhood.)

Besides mapping, fantasy games require ardent bookkeeping. The fantasy hit Wizardry allows up to six characters, each from one of five species, holding one of eight jobs, with one of three alignments—good/human/priest, neutral/gnome/warrior, evil/dwarf/thief, and so on—plus around a dozen other characteristics, not to mention the various equipment (short or long sword, leather or chain armor) each carries. This makes for a superbly varied and rewarding game, but it also makes for some very hard core, D & D-style game fanatics.

**ADVENTURES AND REAL LIFE**

While there have been one or two stories, even tragedies, involving young people who got carried away by or tried to act out Dungeons and Dragons, there don't seem to be grounds for parents to worry about kids hooked on computer adventures. If nothing else, logic and language skills might be at least as worthwhile as the hand-eye coordination promoted by video games.

While fans argue that an adventure that takes about 40 hours to play is no worse than a novel that takes several hours to read, parents may wish for different kinds of adventures. Conan the Barbarian is still the prototype for too many adventure characters; young children might be better off looking for The Dark Crystal (Sierra On-Line's computer adaptation of "The Muppet Movie"), or trying to solve a Snoopers Troops (Spinnaker Software) mystery, than hacking away at the sword-toting warriors. Or they might wander through most of recorded history in Time Zone (Sierra On-Line), a 899.5 graphics adventure that fills six Apple disks. You won't find that kind of adventure in a video arcade.

Compared to video games, in fact, adventures represent something of a phenomenon: wildly popular problem-solving exercises. Rather than laser blasts or instant gratification, adventures offer a challenge akin to a crossword puzzle that tallies back. Except for the adventures that are too hard to even begin, you enjoy them even if you can't finish. And if you do solve one, you can try the words you've learned in the next.
Spruced up with graphics in Apple and Atari versions, they're still creditable competitors. The RETURN key toggles back and forth between a scene's picture and description: elementary two-word sentences answer the "What shall I do?" prompt. Adventureland, the first of the series, is good fun and a fine introduction to the genre, if you don't get bogged down carrying treasures. Climb the cypress tree before you chop it down. (Apple II plus, Atari 800/1200, TI, TRS-80)

**Datamost Inc.**

8943 Fulbright Ave., Chatsworth, CA 91311; (213) 709-1202

The ads for Aztec look like rejected Raiders of the Lost Ark posters, but fans say the fantasy combines modesty with one-key options for everything from crawling through holes to lighting dynamite. The Missing Ring is an enjoyable warmup for Wizardry—up to five characters, each from one of nine classes, can stay together or split up to find treasure and battle beasties.

Make sure the CAPS LOCK key is down, and never mind the graphic tangle when your character, a treasure chest, and three giant rats all occupy the same screen space. Worst complaint: Combat can drag on for minutes. I haven't seen "Swish! Missed!" so many times since I gave up softball. (Apple II/I plus/lle/III)

**Infocom**

55 Wheeler St., Cambridge, MA 02138; (617) 492-1351

The owners of the abandoned house had troubles they couldn't sweep under the rug. Zork I is the program that showed what a text adventure could be; it's spawned a fan club, the sequels Zork II and III, and the All-Time Most Popular Adventure spot in a Softalk readers' poll. Infocom has gone on to become the premier adventure publisher: their packaging and documentation alone are better than many companies' games (the science fiction text adventure Starcross is packaged in a plastic spaceship), and they're the most detailed, literate, and witty writers in the business. Nobody handles complex sentences better.

Suspended is a science fiction tour de force (you control six robots, each with different capabilities and quirks, spread over a mammoth and besieged scientific complex). The mystery thriller Deadline is arguably the best adventure published to date. Three new games, including the mystery Witness, are here or coming. Not for beginners, but the class of the field. (Apple II, Atari, Commodore 64, DEC RT-11/Rainbow, IBM PC, NEC PC-8000, TRS-80 l/III, T1 Professional)

**Mind Games Inc.**

420 S. Beverly Dr., Suite 207. Beverly Hills, CA 90212; (213) 277-8044

The Desecration is a much-advertised "Adventurecade"; as you complete sections of an adventure (such as stealing a spaceship and dodging the air defenses), the program shifts to three different arcade games, and you get some action. The game sections have nice graphics, but the adventure's an appalling model for young children: you are the "Intergalactic Assassin" (sic), proud of the luxuries and one-night stands of your profession, and hired by business rivals to murder one Dunmark Pykro.

The game is riddled with misspellings and grammatical errors by way of tough-guy talk ("Am I sec'inthings again? Look's like an alien"), and clumsily plotted. (Apple)

**Screenplay**

P.O. Box 3558, Chapel Hill, NC 27514; (800) 334-5470

Dunzhin is TRS-80 Model III/IV owners' answer to The Missing Ring: low-resolution graphics, but a great series of mazes (revealed from overhead, but only as you blunder through them) full of monsters and treasure and healing and teleportation rooms. Unlike other fantasy games, Dunzhin lets you control how fast you move (from a cautious step to a headlong run) and where to aim in battle. Don't even think of taking on a cave-beast until you're a level 10 warrior. The saga continues in Kato and The Wylde, which can load existing Dunzhin characters. Asylum and Asylum II are two of the company's popular and tricky adventure games. (Dunzhin, Kato, Wylde: TRS-80, Atari 400/800, Apple II, Commodore 64; Dunzhin: IBM PC; Asylum I: TRS-80, IBM PC; Asylum II: TRS-80)

Screenshots (clockwise): Snooper Troops, Adventure #2, In Search of the Most Amazing Thing, Kabul Spy.
HOW TO PROGRAM AN ADVENTURE IN BASIC

While today's best-selling adventures are formidable feats of programming, the logic behind interactive software rests on a few fundamentally simple commands. In BASIC, you can write an ultra-elementary adventure with three statements—PRINT, to display information on the computer's screen; INPUT, to accept the player's instructions; and IF... GOTO lines, to trigger different responses according to input.

Here's a thumbnail adventure based on a single fork-in-the-road decision:

10 PRINT "YOU ARE IN A CAVE."
20 PRINT "SUDDENLY A MONSTER ATTACKS!"
30 PRINT "SHOULD YOU RUN OR FIGHT?"
40 INPUT A$   
50 IF A$ = "RUN" GOTO 80
60 IF A$ = "FIGHT" GOTO 90
70 GOTO 30
80 PRINT "WHILERUNNING,YOUFALLINTOAPI
AND ARE KILLED!":END
90 PRINT "YOUDEFEATTHEMONSTERANDFINDTHE
ABURSE!":END

After describing the situation, the program poses a question in line 30. Line 40 waits for your response (A$ is a string, i.e., a nonnumeric variable).

The response RUN sends the program to line 80, showing the result of your ill-chosen action. If you answered FIGHT, the program skips line 50 for line 60, where it's ordered to jump to line 90 and display the news of your victory. Line 70 is an error-trapping line, which patiently repeats the question until you hit upon one of the two acceptable answers.

How does this epic compare with commercial adventures? Well, the latter have larger vocabularies; a more sophisticated program would understand ATTACK, HIT MONSTER, FLEE, RUN AWAY, and so on, as well as the two words used here. And real adventures don't have simple forks in the road, but place settings for 12; there may be a dozen possible responses, each of which would trigger a branch to a different display, as well as helpful messages instead of blank silence for error trapping.

Many commercial programs aren't written in BASIC, either. Some of the simplest use assembly or machine language to speed up play, and some are state-of-the-art material. Wizardry, for example, consists of over 14,000 lines of advanced Apple PASCAL.

That's not to say you can't write a good adventure in BASIC. Moreover, the thought and planning required to keep track of the many alternatives—does the character run or fight, live or die?—develops skills that will aid any would-be programmer. The Adventure Writing Data Sheet, by Roger Olsen (83.95 from Aardvark Systems Ltd., 2352 S. Commerce, Walled Lake, MI 48088), is a good resource. It explains in detail the techniques of writing a BASIC adventure; and cassettes of the adventure program itself are available ($5) for the TRS-80, TRS-80 Color Computer, and VIC-20. Another find is Genesis: The Adventure Creator (Hexcraft Software), which allows you to create your own text adventure with up to 97 "rooms," or locations. You make the map of the game and enter all the text descriptions, and Genesis does all the programming. But if you're more adventurous, just expand the above sample program by a few thousand lines, and you might find yourself with a treasure.

—E.G.