

Why Infocom is Better Than Brand X Adventure Company

1. BETTER INPUT PARSER

- large vocabulary of recognized words (800+)
- many synonyms; eg: GET obj = TAKE obj = PICK UP obj = HOLD obj, etc.
- adjectives; eg: GET YELLOW BOOK
 - note that adjectives allow the game to have more than one book.
 - also note that multiple objects must be distinctive; generally, you can't have 12 identical white scrolls lying around. One must be rumpled, dusty, dirty, crinkly, etc. (Exception: Spellbreaker™ had 12 identical white featureless cubes. Referring to a white cube would mean the last one you picked up unless you wrote something on the cube with your burin to make them distinctive.)
- connectives:
TAKE GUN, BOTTLE AND KEY
- prepositions:
POINT GUN AT VILLIAN
OPEN ENVELOPE WITH LETTER OPENER
 - only one prepositional phrase per command supported!
- abbreviations:
the standard directions N, S, E, W, NW, NE, SW, SE, U and D.
L=LOOK, I=INVENTORY, G=AGAIN, Z=WAIT, Q=QUIT.
- multiple commands in one line:
N.S.S.TAKE KNIFE.E.HIT MONSTER
- special words BUT, ALL and IT:
TAKE ALL BOOKS
TAKE ALL BOOKS BUT THE BLACK ONE
TAKE PORTFOLIO. READ IT
- quoting:
SAY "BOO"
TYPE "25"
ANSWER "THE ROOSTER CROWS AT MIDNIGHT"

Infocom's parser is far from perfect, though. It can't handle questions except WHO IS, WHAT IS and WHERE IS. The first two equate to EXAMINE; the third, FIND. A question beginning with WHY would require that the parser handle auxiliary verbs and verb tenses. Attempts to handle possessives have been, well, sloppy. Hitchhikers used the word OF in phrases like BEAST OF TRAAAL or HEART OF GOLD. The parser interpreted them as if TRAAAL and GOLD were adjectives only. This means you could never refer to Traal, the planet, in the game.

— ADVERBS ALSO NOT USED.

2. BETTER PUZZLES

Infocom can provide better puzzles as a direct result of a better parser. Without adjectives, any library could have at most one book. Without prepositions, targets of actions will have to be severely restricted (eg: POUR WATER implies that only one container will be in the vicinity.)

Puzzles are often "fair" in that a reasonably astute and cautious player could solve them without destroying him/herself or vital items in the learning process. Puzzles in areas reached by a one-way access are dependent only on local objects or objects that the player ought to be carrying all the time anyway.

Killing is discouraged as a solution in problem solving, although the Zork series contain exceptions. Typically, a successful slugfest or swordfight ends with you soundly defeating your opponent without actually killing him/her/it. However, you can die in as many gory ways as the authors can imagine. In Trinity™, you have to kill a skink (look it up), but the alternative is atomic armageddeon. Wishbringer™ gives you the chance to

save or kill a beached seahorse with no reward or penalty attached; I don't know why they put that in.

3. NICER PLACES TO VISIT

Descriptions of rooms and objects are detailed so that connecting hallways, control rooms, castles, bedrooms, etc. don't all look like the same boring room. Even if there is nothing in the kitchen of value; the wallpaper, lighting, cleanliness and stuff attached to the refrigerator should reinforce the personality of the people who use this kitchen. And besides, adventures are snoopy, nosy, voyeurs. How long have those pickles been in the frig, anyway? Inquiring minds want to know!

Verbose descriptions make it easier to hide objects in plain sight. If the only useful object in the kitchen is a can-opener; don't just say "You're in the kitchen. There is a can-opener here." Where's the challenge in that? Put the can-opener in a drawer with the knives, spoons and forks; put china and glassware in the cupboards; fill the frig with rotten pickles, moldy bread and sour milk. Let the poor guy find the can-opener himself.

A simple thing Infocom does to improve its landscape is to shun the "You can't go in that direction" message. Infocom games will say different messages as appropriate:

"Tall hedges block your path"

"A tall fence is in that direction"

"The trees and foliage are too thick in that direction"

"A deep chasm lies that way"

"You bump your head against the wall"

"You can't climb the steep cliff face"

"The ocean lies that way, and you didn't bring your bathing suit"

Infocom authors also know how to write; players should have to reach for their dictionaries at least twice in the course of a game.

4. HUMOUR

Presumably one plays a game to have fun, not so the authors can make money. Considering that more copies will be sold if players are having fun, this observation should be obvious.

Infocom employs a few running gags from game to game. One is the ever-present man-eating grue; employed to force adventurers to carry light sources into dark caverns. However, grues exist in unlikely genres; in *Suspect*TM, a horse is named Lurking Grue. The initial location of *Zork*TM I, a mailbox in front a small house, appears in many of the games. In *Beyond Zork*TM, the mailbox is on a red wine bottle's label. But you could still open the mailbox and see a leaflet inside!

Finding the credits in the game can be fun. Once it was carved on a house's cornerstone. Credits appeared once as the result of invoking a fireworks scroll. Credits were tricky to find in *Suspended*TM, where you're dependent on robots to interact with the world. The credits were on a bronze plaque that made a ping-ing sound, and had to be picked up by the robot who could hear (who was the only one who could notice it) and carried to the robot who could see (who was restricted to a fixed set of rooms).

There are many other examples of humour, such as the llama in *Bureaucracy*TM, the sauna in *Hitchhiker's Guide to the Galaxy*TM, etc., etc.

5. EXPERIMENTATION

Infocom lets you do anything to anything. You're allowed to, on finding a green tetrahedron, to kiss it, shake it, rub it, roll it, hit it, cut it, eat it, burn it, open it, etc. in an attempt to figure out what it's for. *Brand X* will only let you take it, drop it or put in the tetrahedron-shaped slot in room 305.

In fact, Infocom will encourage you to do "the wrong thing", giving you smart-aleck remarks if you're on the wrong track and hints if you're on the right track. Hints take the form of key words or a 'suspiciously' long description. The classic example of both

forms of hints is found in Hitchhikers where you must procure a babel fish. The situation is simple: a vending machine with a sign "Babel Fish", a button and a large slot. Money isn't needed. Push the button and a babel fish shoots out the slot; too quickly though and the fish flies through a previously unnoticed hole in the wall. Examining the hole reveals a hook above it. Hang your gown on the hook and try again. Now the fish shoots out the slot, hits the coat, slides down a sleeve and falls into a previously unnoticed grate in the floor. You know you're on the right track because of the verbose reference to the sleeve of the gown. Covering the grate with a towel stops the next fish from falling through, but a cleaning robot snatches the fish off the towel and zooms out through a previously unnoticed panel in the wall. Isn't this getting silly? Put the bulky satchel in front of the panel, and this time the cleaning robot runs into the satchel and throws the fish into the air, where a flying robot snatches it and zooms out of the room.

Here I was stuck for 3 weeks, because there was no mention of anything that the flying robot used that I could block. Effort focused on the satchel when I discovered that if something (say a toothbrush) was put on top of the satchel prior to pushing the button, both the fish and toothbrush flew into the air simultaneously, and the flying robot grabs both. Subliminally, the player would know that you could put things on the satchel because the character Ford Prefect puts the guide on it three turns earlier. Eventually it was a question of what object to put on satchel. I was thinking rice, confetti, a feather pillow; something that would send a cloud of stuff into the air. By brute force, I discovered that the junk mail I left back on Earth was the correct object. Then I reread the description where the flying robot "snatches the babel fish and any other flying junk (such as the toothbrush)" -- the keyword 'junk' was there all along.

6. GIMMICKS AND EXTRAS

The packaging is a delight in its own right and should be considered part of the game, not just the computer program. Infocom usually throws in some cheap goodies such as a "Don't Panic" button, a Moonmist iron-on patch, a Sherlock Holmes keyfob, a receipt from a costume shop, a business card, a matchbook, a Wishbringer stone that glows in the dark, 3-D glasses, postcards from other planets, scratch-n-sniff cards, bubble gum cards, etc.

There is always a sample transcript to show new players how to play, using a scenario that is similar to the one in the actual game. I always read that first, not only because they're a hoot to read, but because they will showcase any non-standard actions or weirdness I might have to look out for (the deliberate lying by the computer in Hitchhiker's, the ability to write in Spellbreaker, the ability to crawl under things in Ballyhoo.)

The game packaging will often hide vital information needed to complete the game; and it won't be obvious what it is until you need it. Stationfall™ requires destination coordinates for your spacetruck depending on what stellar time it is. Unless you have the spacetruck requisition form from the game package, you won't know what coordinates to enter. This, of course, provides incentive to buy the game instead of using a pirated copy.

7. DARING TO BE DIFFERENT

Infocom tries something new with each game. Beyond Zork had object naming, a status window and an on-screen map. Sherlock had sound effects. Battle Zone runs in real time. Leather Goddesses of Phobos had three levels of naughtiness and tailored the game to your gender. Deadline was the first adventure game to use characters that moved independently of your actions. Infidel introduced the anti-hero character. Planetfall scored big with Floyd, the robot sidekick. Suspended used robots with different sensory skills to perform all your actions, simultaneously. A Mind Forever Voyaging used the odd concept of you as an intelligent computer whose human persona can visit simulated futures, with only limited access to the "real" world; almost a philosophical adventure. Moonmist

contains four different variants, with different treasures, clues, evidence and guilty parties in each one.

Notice how many genres are used: science-fiction, fantasy, B-movie, space opera, medieval adventure, murder mystery, high adventure, romance, parody, wordplay,....

Infocom is mostly text only for two main reasons: graphics take up LOTS of memory that could be used for puzzles and prose, and on most computers graphics just don't look all that hot.

One problem that isn't obvious is that over time, computers continue to improve in terms of speed, memory and screen capabilities. This is a problem? Well, not all their customers can afford to buy the latest in computer hardware. Thus, although Infocom wants to use the full capabilities of the latest machines, it still must support the older ones as well. The compromise seems to be that every other game will be made for either extreme. People with the new models can play all the games; older models will run only half. Support for some machines are phased out altogether, or supported only by direct mail orders.

Mechanics of the games.

1. Object Attributes

a. Containment (size) / Contained Object

Although Infocom tries its best, it hasn't always handled containment well. First of all, an object is either a container, or it isn't. If it is a container, it has a certain size. Only objects of a size equal to the containment size or smaller can fit into this object. Objects can be nested: water in bottle in bag in box.

Problem 1: in Hitchhiker's, the thing-your-aunt-gave-you-but-you-don't-know-what-it-is has a much larger containment size than its own size. AD&D would call this a bag of holding. Testing found out that if you put the thing in the pocket of your gown, and then the gown into the thing, the game crashed. Although they fixed that problem, I could still crash the program by putting the bag in the gown, the gown in a box, and the box in the bag.

Problem 2: In Leather Goddesses, I had to put a baby in a blanket, put them into a basket, and leave the basket on the doorstep of an orphanage. You could not just put the baby in the basket, and then cover the baby with the blanket, because you can't manipulate objects inside objects, except to take them out. If you implement the objects the usual way and say PUT BABY IN BLANKET. PUT BABY IN BASKET, then you're taking the baby out of the blanket when you take it to put it in the basket. Infocom solved the problem by inventing a new baby-in-blanket object that takes the place of both baby and blanket, and it's the new prewrapped baby you're putting in the basket. Unfortunately, attempting to unwrap the baby was unexpected, and I had both a blanket and baby-in-blanket thus screwing up the program.

b. Flammable (duration) / Burning

See the discussion on Fire below.

c. Size / Weight

I have yet to see an Infocom game that made a distinction between the two. Weight is only important to limit how much stuff can be carried at once; and sheer bulkiness of too many objects will do just as well.

d. Value / Awarded

Picking up an item or visiting a room may have a point value associated with it. The awarded attribute is to prevent recollecting the value by repicking up the valuable object or re-entering the room.

e. Location

Each object is located in one place, either in a room or inside/atop/under another object. I'm not sure how atop or under are handled, but it seems to me that objects ought to be considered as rooms for the purpose of location. I've never been sure about

how the relationships of objects to people is handled either; that is, when you carry an object -- is that the same as saying the object is in the you-object? Is wearing a pair of sunglasses the same as putting the sunglasses atop the you-object? Is sitting on a chair the same as putting the chair under the you-object? The you-object atop the chair? What if you want to stand on the chair instead?

Problem 3: Containment is linked with Location in that if A contains B, then the location of B is A. That is true for all objects except the player character itself whenever the player boards a vehicle. In Spellbreaker, I tried in vain to fly a magic carpet from the safety of a zippered bag. At best I could achieve either "At Throne Room, on the flying carpet", or "At Throne Room, in the zippered bag", but never "At Throne Room, in the zippered bag, on the flying carpet" even when the bag was clearly on the carpet. Apparently while normal objects can be in rooms or other objects, the player may only be in rooms; the illusion of being in an vehicle object must be a unique attribute of the player.

f. Lid / Open

Is it openable / closeable? Is it open or closed now? Infocom seems to handle this on an as-needed basis. Whenever possible, they prefer uncloseable books and miracle bottles they are always open and never spill.

g. Surface (area) / Objects atop

Quite similar to containment, I think. Some objects have an upper flat surface or not, and of a certain size. Should you restrict what size objects can go on a mantelpiece? Do you allow for overhanging?

h. Description (name / brief / verbose)

Each object in the game has a name, a brief description, and a verbose description. Same with rooms. Object names are used in inventory listings and in messages like "You open the # and find ##". Room names are used in the status line, and at the beginning of any room description. Brief descriptions of objects are for when the object is lying around for the first time. Verbose descriptions of objects are displayed when you specifically LOOK AT or EXAMINE them. Infocom gives you the BRIEF and VERBOSE commands to force room descriptions to be displayed as specified; but the usual course is to show the verbose description on first visit to the room, and the brief description on most subsequent visits.

To be picky, an article type must be assigned per object: "You have a sweater, a n apple and (nil) Queen Alexis' left slipper.

2. Special Objects

a. Water

Water is implemented as two objects: the water-you-carry and the water-everywhere-else. The problem is that objects can only be in one location at a time. Infidel is the only Infocom game that offers more than one container that can carry water. Unfortunately, you can only fill one of them at a time.

Water is also a pain because it's so versatile. You can drink it, water plants with it, wash things in it, swim in it. Permitting swimming is a nuisance because you have to consider how water would affect everything you're carrying: make scrolls unreadable, put out lit objects, make everything unburnable, make food like bread soggy and thus unedible, etc.

Note how whenever you pour water on the ground it evaporates instantly. It's far easier to move the one water-you-carry object to the Warp than to implement a bunch of puddle objects.

b. Fire

Fire isn't implemented as an object at all; it's an attribute of any burning object. Note that any burning object is a light source. Most burning objects can light other burnable objects also.

c. Air

Air is omnipresent and can never be carried. To say something like PUT AIR IN RAFT is equated to INFLATE RAFT so as to ignore the fact that air is involved.

d. Earth

Earth is omnipresent and can never be carried. Who wants to keep track of little piles of dirt and mud? You can dig in it, but that's about all.

e. Snow

Snow, when it exists, is only in a few rooms and can never be carried. If they let you pick it up, they'd have to worry about a multitude of possible snowball objects lying all over the place.

f. Money

Money could pose the same problem as water, earth and snow if the program had to keep track of each little coin. Instead you're offered upto one of each different coin of the realm, or your wallet has a changing monetary value, or coinage treasure is considered as a group object, such as a BAG OF COINS.

f. Walls

There seems to be three ways of handling walls. Either a room has no walls, or it has non-descript walls in all directions, or it has a set of unique wall-objects. Similar treatment holds for ceiling and floor. Some games apparently code each room as being indoor or outdoor and react accordingly.

g. Light

Light is handled the same way fire is; some objects emit light, others do not. It's an attribute of the object. However, you must also code each room as being lit or not.

g. You

Apart from everything else mentioned, some actions applied against yourself will have specialized default actions/messages. KILL ME will let the player committ suicide. EXAMINE ME is difficult without extending your eyes first. It's annoying that commands like SHAKE ME will be answered by "You're not holding the you." But I once typed TAKE ME and was rewarded with "How romantic!"

3. Special Rooms

a. Warp

I'm using Cosmic Encounter terms here; I don't know what Infocom calls these rooms. The Warp is the repository of objects yet to be; or objects temporarily out of reach. In the original adventure in Colasul Cave, the giant eggs were originally in the Giant Room. When you give them to the dwarf, the eggs went here. Using the Fee-Fie-Foo spell returns them from the Warp to the Giant Room. Also, the broken lantern is here at the beginning of the game. When you break your lantern, it goes to the Void, and the broken lantern takes its place in your inventory.

b. Void

The Void is the repository of objects forever destroyed. If you're carrying the eggs and fall down a cliff, the eggs are destroyed and go to the Void. The Fee-Fie-Foo spell will not return the eggs from the Void.