

Oracle Capabilities

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November 10, 1986

Introduction

This document describes the capabilities that need to be made available to the person playing the role of *Habitat* Oracle. This is not a complete definition of a general operator's utility. Rather, these functions relate solely to the Oracle's largely informational function within the system.

Types of Oracles

As mentioned in the previous document **Habitat Operations** there are four different ways the Oracle is manifested in the world:

The Fountain
The Crystal Ball
The Genie in The Magic Lamp
The Bureaucrat-in-a-Box

Each of these has a particular role to play in the operation of the world and a particular style of interaction that is characteristic of it. However, they all share a common underlying information flow pattern: (1) the player says something to an Oracular object; (2) this utterance is recorded in a log file along with a time stamp, the identity of the player who spoke, and the identity of the particular Oracular object spoken to; (3) an operator periodically reviews this log file and (4) responds accordingly. The response can take the form of a message to the player and/or changes to the world. Alternatively, the operator can choose not to respond at all.

In addition, the fountain and the crystal ball may, at the operator's option, be run "live", i.e., with the operator conversing directly with the players through the Oracular object. However, this is strictly optional and is to be used for enrichment of the players' experience rather than as a cornerstone of system operation.

Player interaction

In order to understand the motivating needs of Oracle support software on the host, it is helpful to understand how the different types of Oracular objects work from the player's point of view.

The Fountain

The Fountain is the canonical form that the Oracle takes. It appears to the players as a tacky town-square type fountain. The players may ask questions or otherwise communicate with it by pointing to it and **TALKing**. The Fountain can talk back to the players, and its utterances appear as word balloons over the water spout.

The Fountain is the classic oracle: its purpose is to answer questions about the present and future. It only answers questions when it has some purpose in doing so. In other words, it gives out information to manipulate the mortals, rather than to be a public service. Its answers tend to be subtle and cryptic but they are consistently truthful. The only exception is the rare "false Oracle" which consistently tells lies.

Ordinarily, the Fountain doesn't converse with Avatars. Instead, their questions are answered a day or two later via mail messages, if the Oracle chooses to respond at all. On rare occasions the Fountain *will* converse with passers by. More often, however, it may broadcast pronouncements, repeating a particular

message every few minutes.

The Crystal Ball

The Crystal Ball looks just like what it is. Other than being portable, it operates like the Fountain: you ask it questions by pointing and **TALKing**. It can talk back to you live or respond via mail.

The Crystal Ball is rather like the Fountain, in that its purpose is to answer questions. However, it is a captive resource in that it will only answer to the Avatar that it believes to be its "owner". If you are the owner, you are much more likely to get an answer to a question asked of your Crystal Ball than of a Fountain (if you are not the owner, it will ignore you). Like the fountain, its answers are subtle and cryptic. Unlike the Oracle, they are often deliberately misleading, and while the Crystal Ball will not lie outright, it will sometimes bend the truth a bit to manipulate the unwary. The Crystal Ball is a somewhat more individualistic and malevolent persona than the Fountain, though it can be useful to the careful player.

The Crystal Ball's idea of its "owner" is simply the Avatar who has asked it the most questions lately. Thus, if you come into possession of a Crystal Ball, it will tend to ignore you for the first few days until it gets to know you. Also, the Crystal Ball is much more likely to be helpful and truthful if it decides it likes you. If it doesn't like you it may try to get you to do things that will get you killed or try to get you to give it to somebody else.

The Genie in The Magic Lamp

The Genie is contained in a Magic Lamp (just like Aladdin's) that somebody finds somewhere. A player who picks up the lamp can "rub" using **DO**, causing the Genie to appear. The Genie comes out of the lamp in a puff of smoke and says, "Your wish is my command." The Avatar who rubbed the lamp may then **TALK** to the Genie *once* to make a wish (the Genie will ignore anyone else talking to it). When the player makes his wish the Genie says "I'll see what I can do." and disappears along with the lamp. The Genie will also disappear saying "Time's up, you lose!" if the player takes too long (say, 10 minutes) before uttering his wish (n.b.: this timeout is not yet implemented). Once the wish is recorded, the player need only wait. It will be granted at some time in the future.

Note that the Genie guarantees to respond. Fortunately for us, the player only gets one attempt to make a wish, and then the Genie and the lamp both disappear — it's a one-shot deal. This means that is easy for us to limit the operator load generated by servicing wishes made to Genies by limiting the number of magic lamps we scatter around the world.

The only tricky part of handling the Genie, then, is actually granting the wishes. This is because this will generally require direct alterations to the world (using *Twiddle* or some descendant utility). Such alterations may only be performed by a knowledgeable and trustworthy person. This should not be an undue strain if the number of wishes to be granted is small. Also, the person playing Genie may distort the wish as necessary for pragmatic reasons by such time worn devices as taking the wisher overly literally, subtly misconstruing what was said, and so on.

The Bureaucrat-in-a-Box

The Bureaucrat-in-a-Box is the representative of the more administrative functions of the system operators. In City Hall there are multiple Bureaucrats, each with a particular purpose. However, they operate identically: the Bureaucrat initially appears as a desk-like box. The player points at it and chooses **DO**, whereupon a head springs out and asks, "What do you want?". The player can then make a request by **TALKing** to the head, just as he or she would make a wish of a Genie. The head says, "Well, we'll see what we can do." and pops back into its box. Later on, the player receives a mail message informing him of the disposition of his business.

As mentioned above, each Bureaucrat has a particular purpose, which is indicated by a sign above it. Each will only respond to requests that relate to its particular business; all others will be bounced back with a rude "that's not my job" letter. There are currently four Bureaucrats planned for Populopolis, to handle transfers of title to turves, posting of public advertisements, scheduling of public facilities, and allocation of business properties. All will also respond to generic information inquiries with a canned letter describing the functions of the various Bureaucrats.

The operator handling a Bureaucrat needs to sift through the requests and deal with each by throwing it away, sending a form letter, or actually taking some substantive action. In the case of the Bureaucrats currently defined, this substantive action can include: giving an Avatar the key to a particular piece of commercial real estate (and possibly making the interior of that establishment the Avatar's turf), changing the turf assignment of one or more Avatars, changing the text on public signs, and so on. The exact rules and procedures for each will be defined as part of the detailed specification of adventures and activities that is to come in a future document.

Required Utilities

In light of the above discussion, the following capabilities and utilities are required:

- Utterances made by players to Oracular objects must be logged appropriately as described above. The object behavior routines on the host all funnel such utterances through a generic procedure named `message_to_god`, so all that is required is the actual logging mechanism.
- The operator needs a way to filter the log file by Oracular object. In other words, there should be a way to view the requests made to a particular manifestation of the Oracle. Once a particular request is dealt with, there should be a way of removing it from the log or of marking it so that it does not further present itself to the operator's attention.
- The operator needs a way to send *Habitat* mail messages to particular Avatars. Ideally, there should be a way to interactively step through the request log and simply issue a command that says, in effect, "mail to the Avatar who made this request". It is also desirable to be able to extract outgoing mail messages from a library of form letters written to handle common situations. The mail messages sent by the Oracle should be postmarked with a "From" line that identifies them as coming from the appropriate source (e.g., "The Oracle" (the Fountain), "The *Real* Oracle" (the false Oracle), "Bureau of Commercial Property Management" (a Bureaucrat), "Your Crystal Ball" (a Crystal Ball), etc.).
- There should be a facility to connect an operator "live" to a particular Oracular object, so that anything said to it is transmitted to him immediately and anything he types appears as a word balloon over it. These conversations should be logged for future reference.
- There should be a way to set a Fountain to broadcasting a particular "canned" message every few minutes to whoever is in the region with it. Ideally, this should be done with a scheduling mechanism that lets us set it up to, for example, send out this announcement, "blah blah blah", every five minutes from 7:00pm tonight until 10:00pm.
- Operators handling the Genie or a Bureaucrat need a utility such as *Twiddle* in order to make the requisite changes to the world required by the requests made to them. Ultimately, a more powerful utility than *Twiddle* will be needed in order to easily manipulate all the various elements of the world and to grant restricted access to selected subsets of the collection of possible such manipulations. Ideally, for example, we would like to be able to configure the utility (using some sort of access and privilege control file, for example) for different purposes. Thus the person handling turf allocations would be able to change Avatars' turf assignments and nothing else, while the person handling public advertising would only be able to change the text on particular signs. Specification (let alone implementation) of such a utility is a future task however. For the time being we will use *Twiddle*.