Adventures in The MicroCosm

strategies for making the universe an interesting place
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Introduction

This document describes various strategies and subterfuges for creating adventures in the **Micro-Cosm**TM universe and for generally stirring things up to make the world an interesting place to visit. This is basically just a collection of ideas, which will undoubtedly grow as the conception of the universe becomes more mature. Unlike the bulk of **MicroCosm** documentary material, this is a statement of possibilities rather than of definite plans. The exposition is deliberately informal. One of the purposes of this document is to get people thinking about the issues raised here so they will generate more ideas about things to do.

The MicroCosm Daily Rant

The *Daily Rant* is the **MicroCosm** newspaper. It's probably published on-line, but maybe it comes through the mail. And maybe it's not the *Daily Rant* but the *Weekly Rant*. In any case it's the major source of news and information in our little world. Most of its contents are mundane: messages from the system administrators (that's us) about changes in the system, pending down-time, and so on; all the usual little things that the operators of on-line systems everywhere have to tell their subscribers about.

The interesting part of the *Rant* though, is the ads. For a fee (which could be a real charge that shows up on your bill at the end of the month or it could be something your avatar pays with "money" found in the universe itself) you can place an ad. The ad can say pretty much whatever you like (subject to the usual limitations about libel and so on) and everyone in the universe will get a chance to read it.

With an ad in the *Rant* you can offer the services of your avatar to others, locate like-minded players to go on adventures with you, sell your possessions, and so on. It also provides a medium for the introduction of information into the world that shields the players from knowledge about whether the information is coming from us or from other players.

Quests For HireTM

Quests For Hire is a company that does business inside the MicroCosm. Maybe we run it. Maybe it's run by some dedicated players to whom we delegate the authority and responsibility. Maybe it just emerges on its own from the player community. In any case, it is the local equivalent of Marin Discoveries or Thomas Cook Ltd. Its job is organizing adventures for people to go on. Some of these adventures are simple jaunts: guided tours to familiarize the unfamiliar player with parts of the world. Others are epic quests to find all manner of holy grails, rescue the imprisoned, liberate the oppressed, save the weak, etc. Such quests can involve many players operating in concert with each other.

Typically, Quests For Hire places an ad in the Daily Rant, something like:

BORED?

Volunteers sought for expedition now organizing to explore the Outer Reaches. Great rewards possible for motivated individuals. Contact Quests For Hire, Inc., Daily Rant Box 47 or come to the organizing meeting, Tuesday, 9:00PM EST at the Fnork Fountain in Strackhenville. Orphans preferred.

The resourceful folks at Quests For Hire set everything up for you. They map out the route of travel. They arrange for someone to lead the expedition. If you join the expedition they'll provide you with equipment and any necessary information. Depending on the adventure, you may have to pay them or they may pay you. For example, if you're just going on a guided tour with them, they'll want to be compensated. On the other hand, if you're signing on as a mercenary in somebody else's quest for the holy grail, then you'll get paid the prevailing rate for such work. Presumably that somebody else is putting up the bucks to finance the expedition. They also do behind-the-scenes wheeling and dealing to place interesting artifacts in your path, set up situations for you to encounter, arrange for foes to appear and oppose you, and so on. Quests For Hire is really a rather slippery organization, since you're never quite sure whose side they're really on. In reality they're on the side of making the experience as interesting as possible.

Buried Treasure

Organized quests are really just one end of a continuum of planned opportunities for people to get involved in an adventure. At the other end of this continuum is what I call buried treasure. Buried treasure is just that. We hide interesting or valuable artifacts somewhere in the world. Some of them are minor and easy to find, like a dime you would find on the sidewalk. Others are substantial and well hidden, requiring cleverness and perseverance to seek them out. For many of these treasures we also plant clues, resulting in an ongoing series of puzzles for the amusement of the players. For example, we could place an ad in the Rant:

In the place of the powerless lies the most powerful thing Six great circles surround the ring But beware the lurk

which is obviously a riddle whose answer will lead you towards some goodie.

We can also leave treasure maps and other clues lying around. Some will be red herrings that lead you haplessly on the most bizarre wild goose chases. Others will be genuine and take you to an honest reward.

The Hand Of God

Setting up quests and burying treasure involve manipulations to the state of the world that are usually within the power of ordinary players. Extraordinary manipulations of the world are conceivable, however, that can be used to intervene in various ways to add spice and to keep things moving forward. Such manipulations require special, privileged access to the host's internal representation of the world. In other words, they must be acts of God.

Godly interventions can take many forms. They can be the traditional miracles: healing grievous wounds, raising the dead, providing food in the desert, turning water into wine, making a silk purse out of a sow's ear, and so on. They can involve throwing obstacles in the path of the overly ambitious, granting extraordinary powers to special individuals, zapping litterbugs, etc. God (that's us, really) can do pretty much anything to anybody as long as the effect is consistent with the underlying world model.

One of the more important things God can do is send people messages that will carry with them the weight of substantial authority. These can range from the vaguely unsettling

You better watch your step, honey.

- God

to the disconcertingly specific

Be at the front door of your house at 10:00PM tonight, or else.

- God

to the reassuringly supportive

Congratulations! You have just been granted the boon of invincibility. For the next 24 hours, nobody can do anything to injure you. Have a good time, and try real hard not to do anything *stupid*.

- God

Obviously, being God will be a big responsibility. We will need to decide whether the **MicroCosm** God will be capricious and arbitrary, just to stir things up, or whether He (She?) will attempt to enforce some standard of behavior among the inhabitants of the world. Also, we must choose what degree of interventionism is most appropriate. Should God intervene only rarely or will miracles happen to folks every day? There is an issue of privacy here, in the degree of monitoring of worldly events that will be required. There is also an issue of cost and efficiency, in the amount of time and effort that will be needed on our behalf to fulfill deific responsibilities. We also need to decide if we even want to have our interventions in the proceedings of the universe couched in any sort of religious imagery, be it either serious or frivolous.

Start A War, Get A Check

Whenever you get a group of people together, they spontaneously form higher level social structures. These structures depend on the circumstances the people gather under, the purposes they gather for, and how many of them that there are. People can form cliques, clubs, committees, associations, corporations, families, gangs, tribes, towns, and nations, to name but a few things. Assuming the population of the **MicroCosm** gets sufficiently large, I think we can expect analogs of all of these to arise in one form or another.

Once higher levels of social organization develop, the social model of the world becomes much more complex. This is because now, in addition to the interactions between individuals, we have interactions between the various groups to contend with also. Two of the most interesting interactions between social groups are conflict and commerce. I think we will experience both of these in **MicroCosm**.

Technical constraints will limit the degree of open armed conflict between groups. Because the home computers that will be animating the players' displays are only so fast, we must restrict the number of avatars that can appear on a player's screen at any one time. There are several schemes for doing this, the most promising being a sort of social adaptation of the Pauli Exclusion Principle, but the technicalities are outside the scope of this document. However it is accomplished, this limitation will in turn mean that battles in the classic sense, where large groups of people openly confront each other, will not be possible. This does not mean that nations of avatars cannot have wars with each other (though we would hope that the players will have the sense not to), but it does mean that such conflicts will happen on a fairly personal level. There are also constraints on the tempo of combat, imposed by the slow speed of the typical communications link to the host (usually 300 baud) and the delays that result from the packet switching network that we use. Again, this means that while interpersonal combat is possible, it will not be the fast-action shoot'em-up that we associate with traditional video games. Combat will, in fact, be tedious and nerve wracking. The result, I believe, will be that struggles between groups will be more political than military.

This, I think, is just as well.

Money

It is pretty clear that the **MicroCosm** universe should have money in it. The big question, though, is what is the unit of currency?

I rather like tokens because of the historic association of tokens with video games and also because of my long time association with members of the Manhattan Nationalist Party who advocate, among other things, that the monetary system of New York City should be based on the subway token.

Somebody else recently suggested that cookies would be a good choice. Obviously they come in a range of denominations with chocolate chip cookies being the most valuable and coconut macaroons (or, as some say, fig newtons) being the least valuable. Cookies are also consumable, which has interesting ramifications on the underlying monetary system. But maybe they're a little too cute.

My completely naive notions of economics tell me that the value inherent in money, since money is simply a convenient symbolic representation for value, comes from two directions. The first is the inherent utility of things in the world. Obviously a swiss army knife is more valuable than a random lump of equivalent quantities of metal and plastic, because the materials are organized in a fashion that is simply more useful. This is why barter makes sense: people have an idea of the relative worth of various goods and services. The second direction is the idea of conserved quantities. This is the idea behind the old gold standard — there is only so much gold in the world, so the value of all the world's gold must remain more or less constant. Thus, a certain quantity of gold can represent a certain quantity of value, and you know that it is safe to trade your goods and services for gold because its intrinsic value is conserved. There isn't going to be more of it appearing suddenly, because it just can't be mined that fast. There isn't going to be less of it either (not that anyone would really care) because it's not really useful for anything except being money (actually, gold is quite a useful material, but the relative scarcity that makes it a good currency also makes it too expensive to use in quantity). Nowadays the conserved quantity is just a number set by various governments on the basis of prevailing economic theory, but the principle is the same.

In any case, the fundamental question at hand is: what is the basis of the value of MicroCosm's standard currency. In other words, why would someone choose to exchange, say, a car for 5000 tokens? The answer is that he knows that he can in turn exchange the 5000 tokens for something else of equivalent value. My intuition, then, is that we can simply introduce tokens as objects whose properties (lightweight, compact, not useful for anything else) make them convenient for representing money, and so long as the quantity available is conserved (or at least controlled — perhaps we will have something that functions as the **MicroCosm** equivalent of the Federal Reserve Board) it will work.

Real Money

An interesting possibility is somehow tying the value of MicroCosm tokens (or some other object or service available in the universe) to real money or at least to something with real value in the real world. For example, we might allow players to cash in some of their tokens to pay their on-line services bills. This opens up the obvious possibility of letting a player create tokens in the **MicroCosm** by charging it to his account. Allowing free exchange between the currency of the real world and that of the fantasy world would probably open too many regulatory cans of worms with all sorts of nasty governmental entanglements, but a limited form of exchange may still be beneficial. For example, the hero of a quest returns home with an enormous jewel as part of his booty. What's he going to do with it? Perhaps we can let him trade it in on some prize that recognizes his achievement. This could be an hour's free use of the system (something with small but real value), a chocolate dragon (something with real but still mostly symbolic value) or a trophy, plaque, or certificate proclaiming his heroism (a thing of almost entirely symbolic value).

Quantum TunnelingTM

The topology of the universe does not have to be as constrained as it is in the real world. The basic geometry of the MicroCosm is that it is a great plain. Avatars move about by walking around on its surface, or by traveling in vehicles, which is like walking only faster. This simple surface, however, is just a convenient fiction for helping us visualize the geography. There is no reason why regions of the world have to maintain the same spatial connectivity with one another that this model implies. The geometry may, in fact, be highly non-Euclidean, with essentially no additional overhead on the part of any of the computers involved (though perhaps with considerable overhead in the player's mind, depending upon how truly bizarre we make it).

The simplest non-Euclidean element to introduce into the world is the *teleport booth*. This is simply an object that zaps your avatar to some distant locale, just like a telephone except that you get to send your whole body rather than just your voice — step in, press a button and *POOF!*, you're someplace else. Teleport booths are an easy way to make the world's geometry highly non-Euclidean without forcing the players into contorting their minds to visualize weird spaces.

A more subtle violation of the conventional rules of geometry would be a portal linking two disparate pieces of the world. This could be a cavern or a doorway that your avatar walks through or simply a magic place on the ground that your avatar walks over. It would be like having a street where one end of a particular block is in San Francisco and the other end is in New York. Walk down the street one block and you wind up on the opposite coast.

Such connections between places do not have to be passive. For example, a portal could take different player's avatars to different places depending on some condition. For example, everyone passing through the portal who is wearing green goes to place A while everyone wearing blue goes to place B. A trap portal could transport everyone with lots of money on their person to a villain's lair while letting others pass normally.

We could make the geometry vary in time in interesting ways. For example, there could be a magical wishing well that only appears on the night of a full moon. However, it wouldn't be the well itself that comes and goes, but the very *place* in which it is found. When it's gone, it isn't just that there is an empty piece of ground where the well should be, rather, the whole place simply isn't there. All the places that are next to it when it is there are just next to one another when it's not.

All the pieces of territory that make up the world could be connected together in very strange ways. However, we probably don't wish to deviate from the Euclidean model too drastically, or the players may become disoriented.

The Universe Next Door

With this ability to link disparate parts of the world together, we can just as easily link separate universes. Separate universes are obviously desirable because of the storage and communications limitations of our machines. We can only store so many objects and so much graphics code in the typical home computer's memory and disk capacity. This limits the degree of visual and functional diversity of the elements found in the universe. However, we can easily build separate universes with completely different graphical styles and completely different collections of functional objects. The host, however, remains the same, as does the underlying modeling software that the host is running. Thus, to the host, it's all one big collection of data, and it is as easy to connect one universe to another as it is to connect one part of a single universe to another. With a simple transition sequence for the player's benefit (in which he is prompted to replace his ABC Universe diskette with his XYZ Universe diskette) we can still let the player travel from one world to the other.

With such a capability we can support multiple fantasies and multiple visual styles. For example, the first universe will probably be the stark flat plain with cars and houses that has been illustrated in all the storyboards. However, we could later add another universe that looked like outer space, with orbiting space stations and spaceships and avatars in spacesuits. This would require a whole new set of objects and imagery that would have to be distributed to the players as a whole new disk of software, but once a player has established an existence in both universes he can easily hop between them.

Vest Pocket RealitiesTM

The partitioning between universes described above is primarily a technicality. If two universes share the same family of images and objects, the distinction between them — whether it is one universe or two — is very blurry indeed. We can create little pockets of world that are in one sense part of the whole and in another sense separate places of their own. Thus we can make offshoots of a given reality for specialized

purposes. For example, let's say that Quests For Hire wants to lead a quest to the magical kingdom of Graustark. The folks operating the quest don't want everybody in the world to be able to step in and mess up the fantasy, just as film makers shooting on location don't want just anyone to be able to walk in front of the camera even though they're in a public place. So, the magical kingdom of Graustark is a special place, set up (by us) solely for the benefit of Quests For Hire. Its only connection to the mainstream universe is a special portal that only people authorized by Quests For Hire can pass through. The only avatars who get in, therefore, are the people on the quest and "actors" working on Quests For Hire's behalf to play out the fantasy for them.