

Game Design for Contesters — Part 4: Feelings as Design Specs

What is our hobby exactly, and what good is it?

Bad Relationship Management

In college I had a relationship with a girl that started out well but soon headed south. I was a bad person, all of our problems were entirely my fault, and she let me know it. If I did something nice for someone else, she would ask, “What about *me*?” If I did something nice for her, she would ask, “Now, why can’t you be like this *all* the time?”

I would never have cheated on her, but I became interested in ham radio again to the point of obsession. Eventually, she dumped me, saying that my hobby seemed to leave no room in my life for *her*. She told me I had a bad attitude and that I was completely out of touch with my emotions.

So, what did ham radio give me that my girlfriend did not?

First of all, she had a point. I had the wrong attitude — toward *her* at least. More specifically, I did not have the right *lusory* attitude, a game designers’ term for the psychological state a person needs to enter in order to play a game. The term was coined by the philosopher Bernard Suits, who defined the playing of a game as “the voluntary attempt to overcome unnecessary obstacles.”

Staying up 48 hours to have meaningless 6 second conversations with people all over the world is completely unnecessary, but I loved doing it. My girlfriend could not see how that could possibly be more important to me than *her* happiness. But making *her* happy was a *mandatory* rule of her game, and that took all the fun out of it. In a contest, even if I scored poorly, I still felt competent at *something*, while her complaints about me made me feel incompetent at *everything*. People love being competent at things they *choose* to do, and they hate being incompetent at things they are *forced* to do.

That ex-girlfriend would accuse people of “playing games” with her emotions. Actually, I think people *should* play games with each other’s emotions. The question is: are they good games, entered into voluntarily, with good rules, and that lead to feeling good emotions? If you are going to convince someone of the value of ham radio and contesting, then you have to know what our hobby is good for *emotionally*.

The Message is the Magic is the Medium

A few years ago, a co-worker and I decided to take our teenage sons to the American Association for the Advancement of Science annual conference.¹ Our pre-trip planning conversation went something like this.

He: “Let’s take my car. It’s brand new. I have an iPod jack, a satellite radio, a GPS, a CD player with quadraphonic sound, and hands-free cellular.”

Me: “Let’s take my 10-year-old beater. I’ve got a cassette tape player we won’t use, an AM/FM radio that we won’t use either, and I have paper maps from Triple A. *But* I have a rig in the car.”

“What good is that?”

“We can talk to people all over the world.”

“I can talk to people all over the world too.”

“But we’ll be talking for free.”

“But I can talk for free too. I have a VoIP plan.”

“Yes, but we’ll be talking to complete strangers.”

“Why would you want to talk to people you don’t know, and what would you talk about?”

“Look, do you know how your mobile phone works?”

He did, and he explained the entire analog-to-digital path and back. After all, the guy heads our systems group.

“That’s great,” I said, “My ham radio uses FM.”

“Do you mean frequency modulation? Because I know what that is too.” He was getting bored.

“No. I mean friggin’ magic.”

“Explain.” He looked skeptical.

“My rig is a magic box that will take a light bulb’s worth of energy from our car battery, modulate it with my voice, and direct it to a short metal stick on the roof of the car in such a way that magic, invisible wave-like particles will boil off it and spread out in every direction.

“Some of those particles will go out into space, but most of them will be absorbed by something — the ground, clouds, trees, and the like. A few will bounce off things, such as the upper atmosphere, the earth and the oceans, before they too are eventually absorbed. A few will bounce off things more than once.

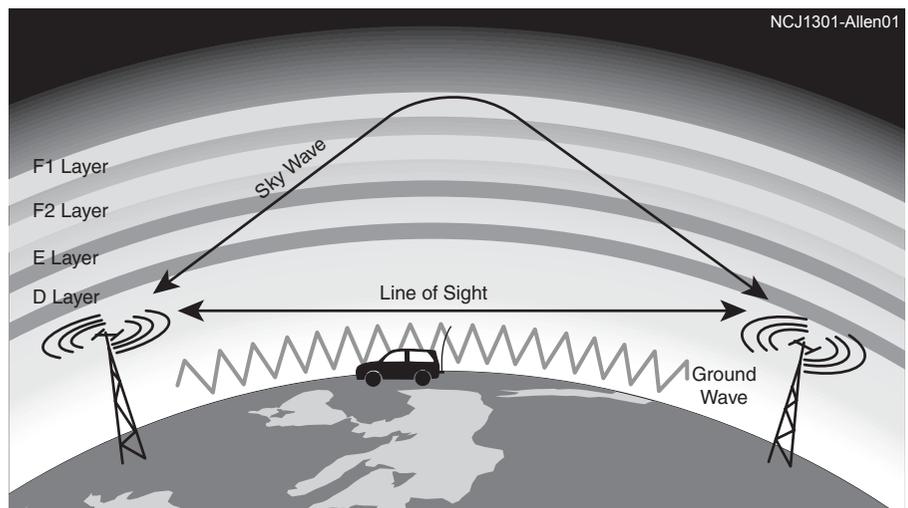


Figure 1 — This is magic, and no other word does it justice.

“Another magician like me in Italy or Russia or Argentina or Japan will have a piece of metal hooked up to *his* magic box. An unfathomable number of magic particles will be hitting his piece of metal from all kinds of sources — manmade, natural, and extraterrestrial. Compare the cross-sectional areas of our two pieces of metal to that of the entire universe, and compare the power of things like lightning bolts, stars, and the big bang to my 100 W, and you will realize that only an infinitesimal fraction of the magic particles he captures will have come from us.

“But he will direct his magic box to select just those few magic particles from me and use them to reconstitute my voice, and he will answer me. It will be as if I flash my headlights and someone in Europe sees it and flashes back. That other magician and I probably won’t have anything in common except that we are both magicians, and that will give us plenty to talk about. The whole thing is magic; there’s no other word for it.”

He was slack-jawed, but when he recovered, he said, “Cool Let’s take your car.” We talked to people in Florence and Moscow and Buenos Aires. The drive to the conference was quite long, but it wasn’t long enough, because 20 meters was still open when we arrived, and I really wanted to work Japan.

Most science teachers do it all wrong. Can you imagine a magician first teaching you how a trick is done, and then doing the trick for you? That would be no fun. Why bother learning how to do magic, if you never get to experience it. Richard Feynman knew that if you want to hook someone on physics, then start with a magic trick, such as the dual-slit experiment. Shoot a single photon at a wall with two slits in it. The photon can only go through one of the slits, but it will interfere with the *probability* that it went through the other one. (Watch www.youtube.com/watch?v=hUJfjRoxCbk, if you are the kind of person who *must* know how a trick is done. Then you will *feel a need* to learn physics.)

In like fashion, most hams explain their hobby all wrong. Instead, explain the magic, and then shut up and see what happens.

At Least You Don’t Die at 2400 Zulu

I have had many conversations such as this:

She: “Radio contests do not make any sense to me in the Internet Age.”

Me: “Do you understand why people run marathons?”

“Sure.”



Figure 2 — You don’t know anything about this woman other than that she is the daughter of SP2AVE.

“But, why on Earth would anyone run 26 miles and 385 yards in this day and age just because legend has it that that two and a half millennia ago some dude ran that distance to announce the results of a battle, and then dropped dead? If you want to go somewhere, just hop in your car. And modern warfare is often covered live on TV, so you know the results of battles the same time the generals do.”

“People run marathons, because they are fun.”

“Most people think going to a movie is fun. But if you insist, ham contests are fun in the same way that marathons are fun — with one difference.”

“What’s that?”

“You can run a marathon all by yourself. But you can’t win a radio contest all by yourself. You can only win if you help your competitors try to beat you, just as they help you try to beat them. How awesome is that?”

Use my approach the next time you have to explain a contest to someone. It works. I’ve never converted anyone to contesting with it, but I do get left alone to do my thing.

Trust is a Must

I was 16 years old in 1968 when I spied a classified in *QST* offering a still-in-the-box unbuild Eico 753 kit for \$138. My net worth stood at \$140.

I cornered Mr Brobst, the chemistry teacher who headed our high school ham radio club, and asked, “Can I trust this guy with my life’s savings?”

“Does he give his call sign?”

“Yes.”

“Does the address in the ad match the one in the *Callbook*?”

“Yes.”

“Then you can trust him with your life.”

In December 2011, I began exchanging e-mails with a young woman I met on a business networking site called **Xing**.

com, the European equivalent of LinkedIn. She said her name was Aleksandra Ejtminowicz Greder, and the profile picture was of one of the most beautiful women I’d ever seen.

She was looking for work. She had once had a thriving business of her own, but her father had become ill, and because she had made it a priority to take care of him in his final years, her business floundered. Although born in Poland, she now lives in Biel, Switzerland, where she is taking care of her young son as a divorced mom. She speaks Polish, English, and French fluently, but not German, which makes things difficult because Biel is in the German-speaking part of Switzerland.

I am an “open networker,” which means that I’m happy to connect to just about anyone over the Internet and help people if I can. But this puts me at heightened risk of scams and frauds. My motto is “Trust, but verify,” and so far I have not been conned, but that does not mean people haven’t tried.

At this point in Aleksandra’s story I became very suspicious, since the “beautiful damsel in distress” is a favorite ploy used to get money out of old men like me. Then she said something that changed everything. She mentioned that her dad had been a ham radio operator.

I asked, “What was his call sign?”

“SP2AVE,” she replied.

It turns out that her father Zbig and I had been exchanging contest reports ever since I was a teenager! When I told her my call sign, her brother remembered my QSL card with the monster KLM-7 10–40 MHz log periodic dipole array. My wife (N2GSG) and I stayed with Aleks in Biel last summer, and she is the real deal.

Can you trust me and my story? Do you feel any connection to her? I sure do, and I want to help her re-establish her career. She has a superb marketer, so if you know anyone who could use a centrally located European distributor, let me know. Do you know people I can introduce her to?

How can you and I share an emotional bond with a woman and her son a continent away just because we both subscribe to *NCJ* and her dad and we might have had conversations on the order of “599 15” “599 05” “TU QRZ”? Whatever explains it, it is precious — one of those things that make contests worth doing and life worth living. It’s a win, even if you finish dead last.

Friends Indeed

I *can* explain the feeling, and the story starts here. I’m on the board of the Center for Neuroeconomic Studies² at Claremont



Figure 3 — Burning Man 2010, the ultimate Field Day site.

Graduate University, where Dr Paul Zak and his team study the neuroscience of trust. In 2008 I told him I'd heard of something called Burning Man,³ an arts festival of sorts where 50,000 people build a city in the desert in Nevada, complete with roads, radio stations, hospitals and even an airport with a 10,000 foot runway (88NV). After the festival, the city is torn down and the desert left spotless. The amazing thing is that no commercial transactions are allowed, not even barter. At Burning Man you may only *give things away*. It's an example of what is called a "gift economy."

Without thinking, Paul said, "Let's go." And without thinking either, I said, "Yes, let's." Paul and I went in 2009. I was enthralled, and I can understand why TIME Book's book *Great Places of History* lists it among civilization's 100 most important sites, up there with the Pyramid of Khufu, the Temple Mount, the Great Wall of China, and Shakespeare's Globe Theater.

In July of 2010, as I was preparing for my second "Burn," I was monitoring the New York City Burning Man reflector when a woman posted a note asking if anyone knew why she was seeing smoke on the horizon. A few Burners checked it out immediately, and one guy posted the exact address. Then

a woman wrote that she had been a Burner since 1998 but had only joined the New York City community the prior week, and in one of those twists of cosmic irony, this is how she finds out that her apartment building is on fire. Immediately the local Burners began organizing to make sure she was okay, that she had a place to stay, food to eat, and so on.

It was then that it hit me. Family are the people who will help you, *even if they don't like you*. Friends are the people who will help you, *because they like you*. Community are the people who will help you, *even if they don't know you*. Sometimes, when you are in trouble, your family might want to help but can't, because there aren't enough of them, they lack the resources, the skills, or the networks. People in crisis often become less fun to be with, and that is why friends often back away just when they are needed — hence the old line, "Write when you get work." But if you are active in a few communities you might discover that, although nobody is obliged to help you, there is a good chance that someone will anyway, even if they have no idea who you are.

Ham radio is not family to me, and almost none of you are my friends. We are a

community, and often that is the only reason we need to be of help to each other.⁴

Perhaps you ever heard of "Farmville." It is a video game that was created in 5 weeks. Launched on June 19, 2009, by February 19, 2010, it had nearly 81 million players.

"Farmville" is not my cup of tea, but I asked a terminally ill friend of mine what "Farmville" meant to her, and she told me how grateful she was to have so many friends all over the world who connected with her through the game and who stood by her during tough times. Then her friends also began flooding me with heart-warming and dramatic stories of how the game affected their lives. And yet, none of these stories was about the game itself. What does that tell you?

Don't Write a Script. Build an Engine

"Where do you see yourself in 5 years?" I hate that question. The president of our firm hates it too. He told me that when he was looking for work on Wall Street, he gave a one-word answer: "Solvent." Half of the firms he interviewed with either have gone belly-up or been bailed out. Where did *they* see themselves in 5 years? I have never had a ready answer to the "5 year plan" question,⁵ but I did not understand why I disliked it until I began to study game design.

Biographies read like stories, but this can fool you into thinking you need to write a script to have a good life. It is exactly the opposite; attempting a scripted life can blind you to opportunity.⁶ Movies without scripts often go over budget and are seldom interesting, but your life is not like a movie; it is like a game.

Games are not movies, or novels, or plays. They are story-generating *engines*. Chess has been generating stories for 1000 years, and today it sits at the heart of an epic battle between silicon and meatware, raising questions of what it means to be human.

Likewise, our hobby has an awesome collection of unscripted stories. People have risked their lives, and some have even died, just to get a “new one” on the air. But who knows about us or our stories?

We Should Own the Game Industry

Telegraphers created the first technology-based social networks before anyone alive today was conceived. The American Radio Relay League was created to do packet switching, and in 1928 it organized the first massively multi-player on-air game — the International Relay Party, today known as the ARRL International DX Contest. Venture capitalists want to back folks with what they call the “early entrant advantage,” and, given the lead we have on everyone else, we should not be learning from game designers; they should be learning from us. It is said that if the railroads had seen themselves as being in the transportation business, they would have started airlines. Likewise, we should own the electronic game industry. Sadly, we blew it.

It's Never Too Late

In Part 3 of this series I made the case that we can design contests that non-hams can play on the Internet and “level-up” into Amateur Radio. Many modern computer games have a made-up back story that establishes a setting and gives players the feeling that they are beginning an epic adventure. Game publishers work hard to form a community around their games. We hams have an advantage over them. We are a well-established community with a rich history that's replete with epic stories of romance, drama, beauty, intrigue, adventure, and magic. We just do a bad job expressing our *emotions*.

Airlines put a dent in intercity rail service, but they completely clobbered ocean liners. Passenger ships were repurposed for pleasure cruising, but the industry was sinking fast. All that changed on September 24, 1977, when *The Love Boat* first aired on ABC Television. Had the words “love” and “boat” not become welded together in people's minds, I doubt the cruise industry would exist today. What can we associate with ham radio and contesting in the same

way? How about love, romance, and adventure?

Homework

1. Research assignment: Recall or research five epic tales of hamming and contesting that would appeal to a non-ham.

2. Writing assignment: Write these stories in ways that evoke strong emotions, using fewer than 500 words apiece.

3. History assignment: When Charles Lindbergh began flying mail between St Louis and Chicago, pilots had a lifespan of 900 flying hours. Will Rogers crusaded for commercial aviation. He survived 12 crashes (but not the 13th). Amelia Earhart popularized aviation for women. She disappeared 2 years after Rogers died. In the late 1930s a car cost about \$700, and a Piper Cub cost about \$1100. Before World War II air races were a big spectator sport covered by the national media, and it seemed everyone wanted to own a plane, if only the US could just get out of The Depression.

Today, commercial aviation has taken off, and it has been extremely safe. Very few people aspire to be pilots or to own their own airplanes, however. On the other hand, nearly every adult in the US drives. Although interest in air races faded after the war, NASCAR races are among the more popular spectator sports.

Write an essay on the parallels between flying and ham radio. How can both Amateur Radio and private aviation become more popular?

4. Business assignment: Imagine that hundreds of ham operators have begun streaming the shortwave spectrum in its entirety from receivers all over the world. An HTML-5 “receiver ap” simulates a software-defined radio and allows anyone to tune the spectrum from anywhere. Your friend Joan writes an add-on she calls *Son of Sun (SOS)* that turns your computer into a transceiver by simulating the behavior of the ionosphere, so that people, whether licensed or not, can talk and listen just as if they are on the air. *SOS* mixes actual on-air QRM/N with voice or Morse that users send over the Internet, properly modified in strength and fading as her propagation model predicts. In short, *SOS* is *Skype* without privacy and with a simulated ionosphere serving as the unnecessary obstacle to be voluntarily overcome.

A game software company offers Joan \$1 million for a 1000 word description of a game that uses *SOS* in a way that might go viral among non-hams. The game must get players to adopt the right *lusory attitude* and keep them in the flow channel. It must make them feel competent at overcoming unnecessary obstacles in a way that seems magical. It must be the basis of a community of trust and generate stories

of epic proportions. In short, it should do everything our hobby already does, with one exception. To maximize market share, it should have no barrier to entry, and it should be equally appealing to both sexes, because, if you are going to spend time feeling great doing epic things with people you trust, you might as well fall in love too. Joan cannot think of a way of doing this, so she offers to split the bounty with you. What do you suggest?

5. Technical assignment: Begin streaming the ham bands and then implement *SOS*.

If your natural inclination is to begin work on the technical assignment and ignore the others, then you will understand the predicament our hobby faces. *SOS* is the only one of these assignments I am certain will be completed (if it hasn't been already). But I'm also pretty sure that if you complete 1 through 4, then, with a compelling 1000 word description of an awesome game, you'll be able to raise the \$1 million to build *SOS*.

As ever, feel free to contact me if you need help with anything, such as beta testing *SOS*.

Notes

¹ The AAAS annual meeting (www.aaas.org/meetings/) is like the Dayton Hamvention[®] of science. You don't need to be a scientist to enjoy it, though, and I've been taking my kids to it on family vacations since they were in the seventh grade.

² See www.neuroeconomicstudies.org/. For a very readable article on the role of trust in economic success, see www.neuroeconomicstudies.org/images/stories/documents/CAPCOTrust.pdf. For an explanation of the role the hormone oxytocin plays in all of this, read Paul's book *The Moral Molecule*.

³ Learn about Burning Man at BurningMan.org and by typing it into YouTube.com. Read how it changed my life in my article “Karma — the Only Currency the Fed Can't Devalue, and the IRS Can't Tax,” www.brookeallen.net/pages/archives/9. If you go, bring your hand-held. There is a ton of activity on .52 simplex.

⁴ We're genetically wired to be this way. I ran my family/friends/community theory past Robin Dunbar, the Oxford University researcher and author of *How Many Friends Does One Person Need? Dunbar's Number and Other Evolutionary Quirks*. You can hear my conversation with him at www.noshortageofwork.com/pages/2947.

⁵ In 1966 when I was 14, my grandmother told me the secret of having an interesting life. “When you are faced with choices that are the same in all other aspects,” she said, “choose the path that offers the greatest adventure.” I've discovered that choices such as these come every year or two, so having a 5-year plan is useless.

⁶ Read *Living an Unscripted Life*, a commencement speech by Harvard University President Drew Faust, www.harvard.edu/president/2010-baccalaureate-speech-living-unscripted-life.

