

Using the Future at NASA

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Stuart Candy: Tell me about JPL's series of posters from the future of space travel.

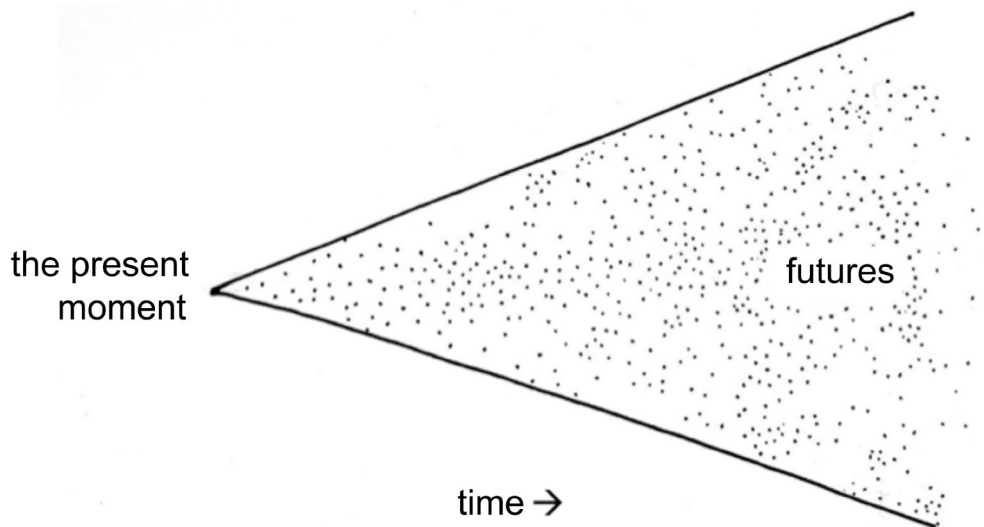
David Delgado: A while back, a famous scientist was planning on coming to the Jet Propulsion Laboratory, and so the Exoplanet Exploration Office asked us to do something to celebrate the diversity of planets that were being discovered. There are thousands of them, and they have all kinds of crazy characteristics that are super interesting. Some rain molten glass, some have two suns, some are considered diamond planets, some are just big gassy giants. Naturally, we wondered what it would be like to go there, and we thought travel posters would be a fun way to showcase different planetary characteristics (Figure 1). So we went to the 1930s, '40s style of illustrated travel poster, and met with scientists to make sure that each one was based on a scientific foundation. But at the same time we wanted it to be joyful. We also wanted to kind of plant that seed: *Maybe we can really go to these places.*



SC: So where did this idea come from? There's been a lot of activity at the intersection of design and futures over the last decade.

DD: Yeah! We sort of fell in love with the idea of imagining these futures, and we made the first few posters. And then Dan Goods and I spoke at the AIGA Conference, and after speaking we were killing some time, and went and saw this crazy futurist — you, Stuart — talking about this sort of experiential futures campaign to raise people's attention. And there was also this cone of possibilities diagram that you showed on the screen, which really helped to crystallise the idea for us, and gave us a way to talk about it strategically and show other people (Figure 2). We may be at the very tip of that cone right now, and going to these future worlds is somewhere farther out in that flurry of many different dots, but the whole notion is to continue doing things that will get us closer to that. How we get there, we don't know, but we know that we need to keep on progressing. And so it was really a catalyst to the way that we thought.

SC: That's great to hear!



Candy 2010, p. 34
(after Hancock & Bezold,
Voros, and others)

Figure 2. Cone of possibility space

DD: And then, apparently, everybody liked it. There were 1,200,000 downloads in one week when we first released the whole set. It was kind of nuts.

SC: Amazing. And the details of the posters were based on the state of the science, what is known about these different planets.

DD: That's right, and we focused on one special thing about each faraway planet, following the model of the original travel posters themselves. You're going to be in a forest, or the desert. We allowed people's imaginations to grow from there.

SC: How did it come about?

DD: It was internal. The design brief was to decorate a hallway — that's where these came from, the request to decorate a hallway.

SC: [laughs] I love that. Instead, you ended up decorating a million hallways.

DD: Right! What's cool is that it grew organically. We had three posters, meant for internal use, and everybody started liking it, and the director of JPL fell in love with it. The director was on vacation at the Grand Canyon, and sent an email saying, "Look at this calendar – let's do one for the posters!" We went from having three to doing another nine very quickly.

SC: So then you did stickers?

DD: Yes. The posters happened, then we had a change of director of JPL, and a huge workload going on at the time. There was a request for us to give a gift to the Laboratory itself, to all of the JPLers. It was kind of an effort to raise morale; at least, that was our approach.

Given that a lot of people are working super hard on really amazing projects, we looked at each of those projects and imagined: what could this lead to? So we decided to create these stickers for clubs and societies from the future that you could join when interplanetary travel is possible, but representing what's currently being worked on.

Each person at JPL got four sets of twelve different designs, like a swag pack that they could hand out to their friends and family, and that would give them a way to tell the story about what JPL is doing, and feel proud about their own work and contribution.

Strategically, the clubs are storytelling devices. At JPL you'll see people put the stickers all over their computer, or people driving around with just an E, for Earth, like the European bumper stickers (Figure 3). When you're travelling throughout the solar system, you need to represent where you're from! It's all done with a wink and a smile.

There's the Secret Order of Dark Matter and Dark Energy.

There's a big push to identify near-Earth asteroids and make sure that Earth stays safe from impact, so we created the Asteroid Patrol.

One was inspired by the 40th anniversary of the Golden Record, so we created the Proud to be Human Club. The Golden Record and Pioneer had all these things about Earth, so we merged them together. There's a lot of reasons to be proud to be human, and let's just celebrate that for a second.

Enceladus is a moon of Saturn. It's also an ice covered planet that shoots out geysers of water. And so since it's covered in ice, we have the Enceladus Hockey League.

SC: These are great.

DD: We had to think about Earth in a different perspective too, as our original home, that we will always consider the first place. It's this motherhood that we are coming and going from; a Buckminster Fuller-inspired, "Spaceship Earth" idea.



Figure 3. Earth bumper sticker from the project *Clubs for the Modern Explorer*, an internal gift from the JPL Director to Lab employees

SC: I bet they were a hit.

DD: Yeah, they were a huge hit. Everybody loved them.

SC: So the clubs and associations thing actually came out of having done some worldbuilding already, and going, “Well, if this existed, then so would these...”

DD: Right. It came from one of the posters, actually, about Titan, a moon of Saturn. One of the great things about Titan is there’s these big seas of hydrocarbons — think of like, liquid nitrogen, but it’s liquid methane. So the design was this beautiful image of the seas with Saturn in the background (Figure 1). This part never made it into the poster, but we were kind of imagining what the boat rental place would be, and the logo for it — and that started us thinking, maybe we could look at logos as a device to communicate something. If that exists, travelling around between planets, what are some cool clubs that you could join in that world?

SC: That’s really interesting. So how would you describe the use of experiential scenarios or design fiction at JPL, what has it done for you?

DD: Well, for one thing it took the conversation out of the present, and allowed people’s imaginations to become involved, thinking about not only what kinds of things are happening now, but where they may lead in the future.

SC: That doesn’t happen regularly?

DD: It does happen regularly, but it's usually positioned within the focus of creating new missions. It's strategic in a different way.

The reason we really gravitated towards it is because it allowed us to create a motivational tool. For people at JPL it sort of reinforced the reason they started working there in the first place: they want to do something big, contribute to humanity, be at the cutting edge. Using the future to help motivate people became a powerful way to communicate internally. If you're part of space exploration, you are part of a group building this continuous series of steps that will lead to something very special.

I think once the poster downloads happened, we realised that it was much bigger than communicating internally. There is this shared public dream of being up in space — it has been in science fiction for a very long time — but these places are real. These designs brought them one step closer, gave them more power.

It was this whole experiment in understanding the value of using the future as a tool for the imagination.

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Notes

This text is an edited transcript of conversations that took place in July 2018. The *Clubs for the Modern Explorer* project was created for JPL internal distribution only and was not paid for at government expense.