

NASA Blueshift - 2013
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The Art of Space, an interview with Ron Miller - Part 2

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Maggie: Welcome to Blueshift, brought to you by NASA's Goddard Space Flight Center. I'm Maggie Masetti. This is Part 2 of our interview with space artist Ron Miller. He's an author, illustrator, consultant, and former art director for the National Air & Space Museum's Albert Einstein planetarium. In Part 1 of our interview, we learned about Ron's art training and his philosophies on space art (he compared it to the Hudson River School), as well how he translates science into a visual medium. In Part 2 we learn more about his job at Air & Space and discuss specific pieces of Ron's work. You'll definitely want to check out our website (universe.nasa.gov/blueshift) because that's where we've posted the pieces of art we talk about during the podcast.

Maggie: You've published books and worked on movies. How does your artwork for a specific science releases or discoveries come about? Do scientists contact you looking for an artist conception or do you get inspired and contact them?

Ron: Both. I try to keep my little catalogue of new things up to date so if I see something in the news, and I think, "Whoa! That's be a pretty picture," I'll sit down and do it. You know, I'll share it amongst my friends or show it to some of the magazine editors I work with sometimes. Other times, people approach me because I have an article in a magazine that they'll need an illustration for. Sort of 50/50.

Maggie: One of my college friends discovered this exoplanet system, which is really kind of cool and unusual because it has what they think are rings. And then there was an article that had your art in it, so I was kind of curious how that came about.

Ron: I did the illustration itself specifically for the "Journey to the Exoplanets" iPad app I did a year ago through Scientific American. I did about a hundred illustrations of various exoplanets. I tried to pick ones that were different. I mean you see one Super Jupiter, you've pretty much seen them all. There isn't any point doing every Super Jupiter there was, so I picked out two or three that had some interesting qualities to them.

So I look for exoplanets or systems that were unusual, something different, something that set them apart so people could see the variety of planets that are being discovered out there. Your friend's just turned out to be one of the ones I thought was cool.

Maggie: He actually presented it at an American Astronomical Society meeting a year ago where this panel was all about weird exoplanet systems, so it was really fascinating to hear about the things that you wouldn't expect to see. But apparently if it's physically possible, it's probably out there somewhere.

Ron: Oh yeah. They've discovered some really, really, really weird places. And I think they've just given up trying to predict what's likely or possible.

Maggie: What are some of your favorite things to illustrate?

Ron: Planets. It's easier to tell you what I don't. I don't like doing hardware. I'm terrible at doing spacecraft, and not that I don't like spaceships; my studio here is filled with old plastic model kits from the fifties and sixties of spaceships. But I'm not very good at illustrating them. So that's one thing I try to avoid at all costs. There are people who do that much better than I do.

Plus, I think I'm more interested in where we're going than how we get there. I seldom put spacecraft, or even astronauts, in the illustrations. Usually I'll do it if it's for scale. It'll be a little person somewhere, largely to get across the idea of just how big a place is. But rather than being the subject itself, kind of like some of these old painters I told you about from the Hudson River School. There'd be a pioneer in the corner or an elk or something, largely just to make the scene look bigger.

Maggie: What's something you'd like to illustrate but haven't yet?

Ron: Whatever the next job I'm being offered is. I like science fiction. I would love to illustrate more Jules Vern than I have. He's my favorite science fiction writer. I would like to illustrate a collection of Edgar Allan Poe. All of Robert Heinlein's juvenile novels.

Maggie: Oh, I love his juveniles.

Ron: Me too. I would love to have the chance to do the covers for a set of those for instance. This is one of those questions, you know, I will lay with all night thinking of better answers to.

Sara: Well, if you come up with more answers, we can always put them in the blog post.

Maggie: That's right. Or shoot us an email.

Sara: We'll say, "Update. Ron emailed us and let us know that the secret was the 'Twilight' novels or..."

Ron: I don't think so.

Sara: One of the things that was interesting... This is Sara by the way.... The other voice. Maggie's been asking questions so far.

The National Air and Space Museum downtown, last year I believe, year before last... had a space art exhibit. So it was a big space art collection that NASA and Air and Space Museum had been curating and collecting for all these years. Did you go see that?

Ron: No, since we moved down where we're at now, they put us like three hours farther from DC than we already were living. It makes it harder to get to DC anymore.

Sara: Yeah, we uncovered some of that because we were interested in it and I luckily could go down there and Tom Crouch took us around the exhibit and showed us what they had and it was amazing.

Ron: Yeah, Tom has been very good about sort of taking over the art collection at the museum and maintaining it because he's always done a wonderful job.

Maggie: What was your favorite thing about working at the Air and Space Museum?

Ron: What wasn't to like? I mean I got to poke at every nook and corner of the place. I got a picture of myself in the X-15

Maggie: Oh, man. That's so cool.

Ron: No kidding! What wasn't to like about the Air and Space Museum?

Maggie: Yeah, I know. It looks amazing.

Ron: I like rockets, and the place was filled with real ones.

Sara: So you sent us a collection of some of the art you've worked on, all of which are beautiful and just absolutely inspiring, which is what I love about space art because I agree – it really lets us see things that otherwise can't be seen through data. But in both the ones I'm looking at right now, you know, they're rocky landscapes with these really inspiring skies and the thing that really struck me about, especially the sky view, was in a sense how realistic it was, how much it looks like Hubble data. Do you stare at hours of what Hubble and Chandra and Spitzer and all these satellites are sending down?

Ron: Not so much. Partly because what largely what Hubble is is the deep space stuff. And it's a nice picture in its own right. For me to do a picture of what I say a Hubble does would be redundant. I'm more interested in the exoplanets, you know, planetary landscapes. Mars, and places in our own solar system, other

solar systems. There's less coming from Hubble and such for things like that.

Sara: Well, mostly my point was just like I'm looking at one and it's this beautiful planetary landscape and what you've got up in the night sky there is this really brilliant nebula in the background...

Ron: Oh, yeah. That's the planet's star exploded and thrown it out of the solar system. That little explosion, I just made that up.

Sara: It looks real. It looks so much like the data that we look at that it was like, how much of that have you looked at to see those things?

Ron: Oh, yeah, I look at planetary nebula to kind of get a feeling of like the anatomy to them.

Sara: It just struck me that if I cropped out the planetary landscape below it, I bet I could sell it to scientists here in our building as Hubble data.

Ron: They'll go crazy trying to figure out what nebula that was.

Sara: What is that?

Ron: I just made it up.

Sara: They decided it was probably too low res for them to figure out what they were looking at, which one it was. It looks a lot like the cat's eye.

Maggie: It's beautiful though.

Sara: But the same thing, you've got one here that's a pulsar planet, and the pulsar I recognize is a pretty common artist conception of what we think the anatomy looks like but what's behind it again is just the nebulae and the clouds and it just struck me again.

Ron: You should try this out some time and see if it...

Sara: I feel like it's a social experiment that...

Maggie: Back to the pulsar planet image, is this... one of the first exoplanet discoveries was a pulsar planet system. Is that what this was inspired by?

Ron: I think it was, yes. I think it was supposed to have been specifically that one, I think. That was one of my earlier ones, so that probably was it.

Maggie: Yeah, cuz Alex Fulsion, he was at Penn State when I was there. He was a professor I had. He was the one who discovered the pulsar planets and it's amazing to look back and think that we didn't know of any exoplanets and then there was that one weird system and now all of a sudden, there's like thousands

of them, and how far we've come in such a short time.

Ron: I know! Amateur astronomers are discovering the things now.

Sara: These days exoplanet discoveries feel cheaper and cheaper because they happen so continuously that you kind of have to one up the next person, so my system is bigger, it has more earth like planets, a better habitable zone, it's weirder...

Maggie: That's kind of what it's about. It's like you said: you've seen one super Jupiter, you've seen them all. We know they exist now and they're probably all over the place. But what else is out there? I think that's kind of exciting that finding what else is possible or, you know, obviously a lot of people really want to find an earth-like planet or something that's habitable.

Ron: In some ways that makes it less interesting because the earth-like planet landscape would kind of look like earth. It's the weirder ones that are fun to illustrate. The more earth-like they get, the more earth-like the landscapes get. Why am I doing something that's indistinguishable from southern California?

Sara: Well again, I think you'd have that thing where you fool people and like, but "surprise!"

Maggie: Actually, it'd be kind of cool to see an earth-like landscape but then something really weird in the sky, like a weird star system.

Sara: That's where those twin suns go. Yeah, we thought you'd also have fun with this. Several years ago, James Webb funded a project called, "Worlds Beyond," and the goal of this project was to have students, children, various groups, basically imagine what they thought other exoplanets might be like and they painted sort of these long poles that had a glowing light up top that represented the planet that they were working on.

And they really ran the whole gamut, from pretty realistic things and of course they were painting a pole. But there were some that I just thought, "well, these are kids who wanted magma so they're gonna get magma. Gonna have water, regardless of if it couldn't have water. I think that's what always inspires me with good scientific visualization and good science art is really that line between accuracy and just pure imagination.

The action in some of the paintings you've done, it's not flat. It's very active and lively and you know, you imagine the magma of a crackling surface or something fiery exploding in the sky. And we've also done this on a smaller scale with kids, where we hand them a piece of paper and say, "Imagine a planet" and so I am waiting for the discovery of Planet Wiggly, which I believe is made entirely of yellow Jello. This is what one child presented to me.

Ron: I have to paint a Wiggly planet myself, I think. I like that.

Sara: And someone else had Planet Lama that was shaped like a lama and occupied entirely by lamas. So when we talk about how if we can imagine it and it's physically possible it'll be out there, then I'm a little afraid of when we discover the Jello planet or the Diamond Chrysalis planet or whatever. These children were fantastically imaginative.

Ron: Well, so far pretty much anything you can possibly imagine is turning out to be real.

Sara: Yeah, Planet Yellow Jello. I'm telling you. 2013.

Ron: And that planet might really be out there for all you know. I kind of hope so.

Maggie: Are you working on anything now that you can tell us about?

Ron: The most space thing I did was a picture, even though I hate doing hardware, was a picture of Curiosity on Mars for Discover Magazine. Yeah, I'm trying to think of anything exoplanety, like really, not in the last... but in a month I think. Oh no, I take it back. I did a picture of the Diamond World or whatever it's called. I can never remember the names of these places because they all sound like...

Maggie: They're all long strings of numbers.

Ron: Yeah, I know. They all sound like, you know, these chemical names. A magazine wanted an illustration of the surface of whichever planet that was that's mostly carbon and graphite on the surface, so I did that.

Maggie: Thank you so much. We really appreciate it. It was really fun talking to you. And your art is amazing.

Sara: It really is.

Ron: I enjoyed it thoroughly.

Sara: Now I wonder how much of it I've seen without ever knowing that it was you.

Ron: All the good stuff. That's mine.

Maggie & Sara: That's right.

Sara: The rest of it.... Well, thank you so very much.

Maggie: Thank you so much.

Ron: Thank you. I enjoyed this very much.

Maggie: Thanks to Ron and thanks to you also for joining us. If you want to check out the art discussed here, it's available on our website, universe.nasa.gov/blueshift. You can also check out our other blogs and podcasts there.

You can also find us on Twitter or Facebook, where we're NASAblueshift, all one word. Send us your questions, tell us what you think, and even what you'd like to hear more about! I'm Maggie Masetti, bringing the Universe closer to you with Blueshift.

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