Pamela Pelletier JOUR 555 Event Story

Art of Planetary Sciences

It all started with a comet, not with a Big Bang. For Allison McGraw, her entry into the 2013 Art of Planetary Science art show was an opportunity to showcase her creativity and passion for astronomy. McGraw, then an undergraduate student working at Flandrau Science Center, crafted a carbon-fiber comet and entered it into the very first Art of Planetary Science event back in 2013.

The event held last November was organized by McGraw, now a PhD student in Lunar and Planetary Sciences at the University of Arizona, and featured more than 200 artworks and 100 artists, which was held at the Lunar and Planetary Sciences building on the University of Arizona campus.

"I'm not artist myself, but I find great pleasure in doodling the asteroid belt. I just like to create," said McGraw.

Art and science are not such strange collaborators. Humans want to understand the world around us and want to share and communicate that visualization with others. The Art of Planetary Sciences event was conceived to share both the artist and scientists love of astronomy with the public.

Ever wondered what life on other planets would look like? Would it possible to imagine a place for humans, or would it be an inhabitable planet unsuited for human life? Artist Andrew Lincoln Nelson, first-place winner in Fine Art division at the event, found insight through his research in engineering, applying artificial evolution on robots and exobiology, also known as astrobiology, the field of science that focuses the potential idea of life on other planets and how it could adapt to different environments. Nelson's art combines familiarity with alien elements. He envisioned fusing natural systems and machine technology together and leaving the ecosystem left to run wild as it evolved to make something new.

"This is something not designed by humans and doesn't play well with human ideas of purpose," said Nelson.

This idea of technology and bio-fusion can be seen in his work "Phyto Osto." This piece depicts an arid landscape, not unlike one found on earth with dry, cracked soil and mountains looming

off in the distance. In the foreground, a tree-like specimen is centered, with root-like structures made of mechanical gears not entirely piercing the ground. Cube-like square structures made of bones replace a leaf canopy. The placement of this "bone tree" gives the viewer with a sense of movement propelling this structure through the landscape.

"My art is really driven by the idea of feral technology that has fully integrated with the ecosystem," said Nelson.

Most people have come across pie charts and bar graphs as common visual forms representing data. Data art has progressed to becoming more artistic through visual, tactile and audible means, as artists are now working with scientists to make data visible and understandable.

Brenda Huettner, a local artist who won first place in the Data Art division at the 2019 event, entered her fiber art project "Tucson Temperature Scarves" into the show as a push to do sixty new things before her sixtieth birthday.

Artists like Huettner take raw data – in this case, temperature record from a specific location – and transform it into a visual medium so that the information can be conveyed. Huettner's fiber art consisted of three scarves crocheted with 10 different colors of yarn to show the corresponding daily temperature, with one row for each day's temperature. The colors (red, orange and yellow) represent ten degrees on a scale of zero to 100.

"The data tells a story," said Huettner. "You need a year and a place to make temperature worthwhile".

The scarves were hung from the third-floor railing. When all three scarves were displayed side by side, the temperature variation from 1958, 1988, and 2018 highlights the trend towards a hotter climate. The start of the year has more of the warmer colors (orange and red) in 2018 than the scarf representing 1958.

"It's not about one scarf – the story is over time," said Huettner.

Combining science information and the classic forms of art making (including performance art, visual art, and digital art) allows scientists and artists new tools to communicate with the public. This year's event, to be held September 2020, will continue to blur boundaries between

art and science. Musicians are slated to join the ensemble, as well the Think Tank Writing Center, working to craft new expression of scientific art during the event.



"Phyto Osto" drawing by artist Andrew Lincoln Nelson, photographed in Tucson, Ariz. on Feb. 7, 2020. (Photo/Pamela Pelletier).



"Tucson Temperature Scarves" by Brenda Huettner, photographed on Feb. 7, 2020. (Photo/Pamela Pelletier).



Drawing by artist Andrew Lincoln Nelson, photographed in Tucson, Ariz. on Feb. 7, 2020. (Photo/Pamela Pelletier).