

Evolution of Fish¹

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The augmented reality (AR) interactive large screen projection *Evolution of Fish* turns the surroundings into an underwater reef, filled with schools of fish. The image from an iPad mounted on a rotating stand is fed into a powerful projector and then projected onto a wall or the side of a building. As AR artworks layer digital content over the iPad's camera view of the surroundings, visitors also see each other as part of the underwater fauna. Visitors can also download the app onto their own smartphones, thereby viewing multiple layers of the project over another.

Visitors turn the iPad to guide the fish in swarms to the left and right - but the more they agitate the fish, the more the fish turn into plastic garbage. Only a period of rest allows the garbage to turn back into fish.

The installation was originally developed for the Digital Graffiti Festival on the Gulf Coast of the Florida Panhandle. It includes large silvery Amberjacks, known for their love of debris and enjoyed in sushi under the Japanese name “kanpachi,” and colorful reef fish that will become more common on the Florida Panhandle Emerald Coast, as they migrate northward due to warming waters.

During the Digital Graffiti Festival in May 2019 the installation was shown as a large interactive outdoor projection on two houses on opposite sides of the Firepit Park in Alys Beach, turning it into a huge “aquarium.”

In the fall of 2019, in a solo exhibit in the Digital Art Space Munich (Director Karin Wimmer), the artists covered every surface of the gallery with plastic garbage, except for a section of wall on which the AR artwork was projected. Visitors were enclosed in a real “plastic waste cave” and peered out through the opening into a sea of fish (that transformed into plastic waste) and other visitors caught in the AR scene.

In the mid 2010s the artists spent time in Southeast Asia and were aghast at seeing uninhabited islands full of plastic garbage—that often came from supposedly “clean” countries far away. With *Evolution of Fish*, they close the circle and bring this experience back to the countries that send their waste to be disposed of—out of sight, out of mind—in Southeast Asia.

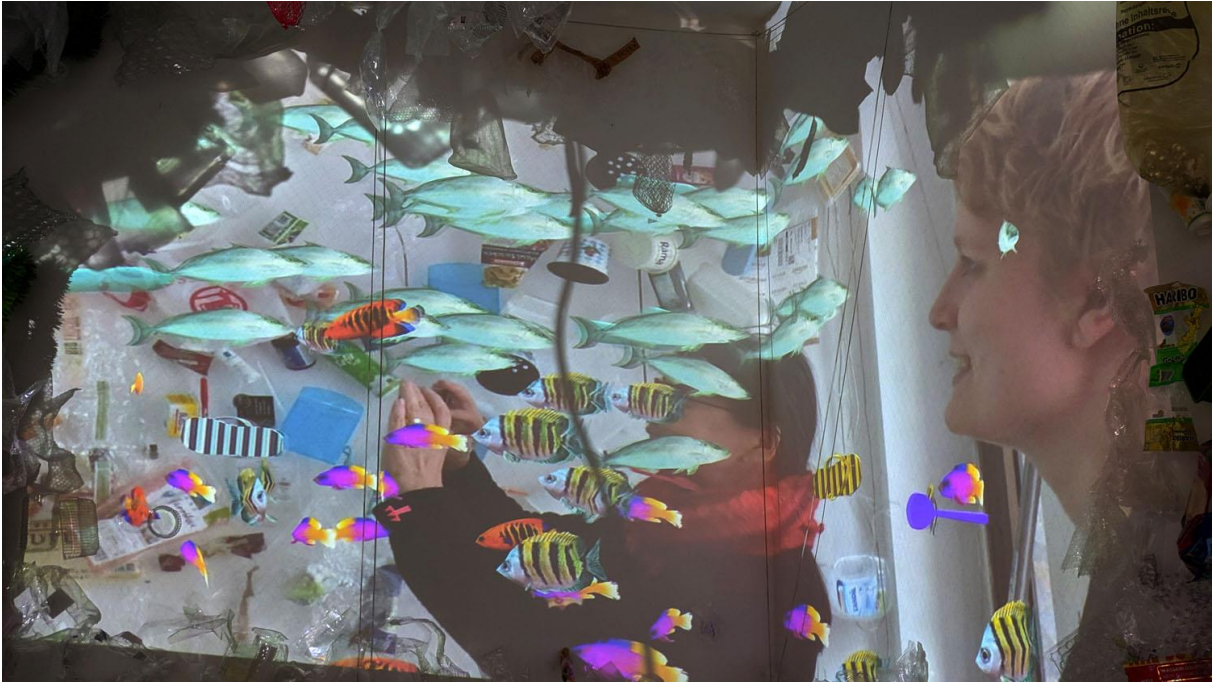
¹ Interactive augmented reality large projection by Tamiko Thiel and /p, 2019 <http://tamikothiel.com/evolutionoffish/>. Originally created as Artists in Residence at the [Digital Graffiti Festival](#), Alys Beach, Florida, USA.



Evolution of Fish, interactive augmented reality large projection, Tamiko Thiel and /p, 2019. Installation view at night, with iPad and projection, Digital Art Space Munich (Director Karin Wimmer), 2019



Evolution of Fish, interactive augmented reality large projection, Tamiko Thiel and /p, 2019. Detail view of projection image at night. Digital Art Space Munich (Director Karin Wimmer), 2019



Evolution of Fish, interactive augmented reality large projection, Tamiko Thiel and /p, 2019.
View of gallery visitors and walls in screen of iPad by daylight. Digital Art Space Munich (Director Karin Wimmer), 2019



Evolution of Fish, interactive augmented reality large projection, Tamiko Thiel and /p, 2019.
Street view of gallery window through visitor's smartphone by night.
Digital Art Space Munich (Director Karin Wimmer), 2019



Evolution of Fish, interactive augmented reality large projection, Tamiko Thiel and /p, 2019.
Installation view of artist /p and iPad (right) and visitor (left) in AR projection.
Digital Graffiti Festival, Alys Beach, Florida, USA, 2019



Evolution of Fish, interactive augmented reality large projection, Tamiko Thiel and /p, 2019.
Detail view of AR projection on house façade, Digital Graffiti Festival, Alys Beach, Florida, USA, 2019