

Impact Statement

Kayla Li, Grade 8

***The Lady Behind The Map*, 2024.**

Acrylic paint and colored pencil on paper 11 x 14 inches.

Studio S Fine Arts, Bellevue, WA

Unsung Hero: Marie Tharp

The Unsung Hero that intrigued me the most was Marie Tharp. As an oceanographer and geologist, she helped create the first scientific map of the Atlantic Ocean floor. As soon as I read her description, I knew that I wanted to choose her as my unsung hero. From a young age I've been interested in science and have read a lot about scientific theories. Additionally, she piqued my interest because I know that being a woman and a scientist in the 19th century is insanely difficult. She is so empowering and inspiring to me because her resources were limited because of sexist ideals yet she was able to create a map that impacted so many.

Marie Tharp was born in the early 1900's and in the 50's she collaborated with Bruce Heezen to make that map. Using data collections and sonar scans, with pen and ink, she was able to create a map that showed the mountains, valleys, and topography of the ocean floor. The map helped prove the theory of the continental drift, that the continents moved, which was huge for understanding Earth's history. Continental drift was the idea that Earth's continents moved as a result of tectonic plates. In the early 1950's little was known about the idea of continental drift, but scientists knew that in order to understand Earth's history, they needed to understand the evolution of the ocean floor. The map she and Heezen created laid down the foundation for discovering Earth's history and how it has changed through the beginning of time. After her creation of the Atlantic Ocean floor, she went on to create maps of the Entire world which I emphasized in my piece.

Throughout my piece, I wanted to highlight the map itself and a collection of scenes that show her creating it. Since she was a woman, at the time she wasn't allowed to do any of the actual data processing. Due to that fact, I thought that it was important to include depictions of her drawing the map ridge by ridge and the insane amount of data analyzing she had to endure. In addition to drawings of the plots she used, I also depicted various scenes of her working on the map.

My process in creating my piece has for sure changed the way I see theories nowadays. It's almost unthinkable that behind each graph I interpret in class, hundreds of unsung heroes put work into it. I already knew about the idea of continental drift and theory of tectonic plates, but I had no idea that Marie Tharp contributed so much. It makes me wonder how many other millions of unsung heroes that are out there that

made a mark on the world yet are still not recognized. I intend to share my artwork with my community through a variety of situations. For example, I would love to share to my classmates and friends who are interested in science and women in STEM. The most important thing I plan to do is share it with my science teachers. My current teacher is a huge believer of women in STEM as well as Earth's history, so I know that she'd be ecstatic to see my drawing and hear about Marie Tharp. Additionally, my school requires us to do mini lessons/presentations every semester so I think focusing on Marie Tharp and her accomplishments would be a great topic. Learning about Marie Tharp and her long process creating that map has made me really curious about the unsung heroes behind modern theories and inventions.