

Impact Statement

Maggie Cooney, Grade 11.

A Spread Spectrum of Success, 2022.
Pen, charcoal on paper, 24 x 18 inches.
Lassiter High School, Marietta, GA
Unsung Hero: Hedy Lamarr

The spotlight has always followed Hedy Lamarr. Her life and her work were always under constant scrutiny as she achieved fame and fortune on the screens of Hollywood. Yet it is not this aspect of her that grabbed me. Hedy Lamarr is unique in the fact that she is groundbreakingly famous, yet arguably her best, most meaningful work has been forgotten. On screen she was praised for her role of the beautiful, exotic woman. Offscreen, she was a true patriot and gifted inventor. Coined "The most beautiful woman in the world", she has been immortalized. In a life of hardship, she achieved remarkable successes in both the arts and the sciences.

It is Lamarr's genius, despite any formal schooling in advanced math and science, that first drew my attention toward her story. During World War II, she developed a patent to prevent German infiltration of American communications. It is this technology that was used to develop the spread spectrum (the basis of much of modern technology). Her invention has been applied to major elements of modern life, including Bluetooth and Wi Fi. Unfortunately, Lamarr was never recognized for her work, on the grounds of her being an immigrant from Austria. She was suspected of espionage, and never publicly spoke of her scientific achievements. Yet, her passion for invention was unwavering.

It is this determination that I find most inspiring. Even with no formal education and a life of fighting for every bit of success that came her way, she never stopped creating. She did what she loved because she loved it, and because she cared. She knew what she deserved, and she never settled for anything less. In a marriage of wealth and status, she refused to sacrifice her goals in life. When living out her goals of a successful acting career, she never became complacent. Without any expectation of recognition for her actions, she spent a lifetime dreaming of ways to improve the lives of others. It is this collective determination throughout her lifetime that, in my opinion, truly makes her an unsung hero.

I chose to represent this in my work by combining elements of her stardom with elements of her patents and its applications. She is a mix of both, and her story would not be complete without recognizing that. With that in mind, in the foreground I drew a camera because her acting career was the part of her most visible to the public. For the water, I chose to emulate the diagram in her patent to create a pattern that fades into the ripples of the water's surface. This water is home to a Navy boat, whose silhouette can be seen behind Hedy Lamarr's hair. This is representative of the original purpose of the patent, to secure US Navy communications. The water is what grounds this drawing, so it made sense for the foundation of her invention to be an element of it. In the background, I overlaid another adaptation of a diagram seen in the patent surrounded by clouds to show that her invention evolved into the technology we use today.

To unify my work, I drew Hedy Lamarr. Her portrait blends into the drawing yet contrasts in certain regions to connect her to her invention while drawing attention to the fact that her role in the spread spectrum is largely forgotten. When people have viewed my work, most comments I receive are that of confusion. I get asked why Hedy Lamarr is surrounded by a battleship, or even why I drew her in the first place. It is this drawing that has sparked those conversations and has led me towards opportunities to share her story. The more I research her life, The more I am amazed by her perseverance and hope for a better future. My goal is for my audience to keep asking these questions. I aspire for my work to lead curious minds, like Lamarr's, to look for answers. Both answers to questions about her past and our collective future. I hope to contribute to the efforts to provide her memory with the recognition and respect it deserves.