

Impact Statement

Pia Smith, Grade 11

***Hedy Lamarr: Under the gleaming lights*, 2024.**

Acrylic on wood panel, 17 x 24 inches.

West Anchorage High School, Anchorage, AK

Unsung Hero: Hedy Lamarr

Hedy Lamarr was born into a well-off family in 1914 in Vienna, Austria. From a young age her father stimulated her thinking by introducing her to different machines that surrounded her life. Her love for music and art came from her mother who was a concert pianist. Though she had a sharp mind, as she grew her beauty became her defining quality in the eyes of society. After being discovered by a movie producer, her first film was a German movie called *Geld auf der Straße* (1930), but she only gained popularity for her later film *Ecstasy* (1933). Her early popularity would lead to her first marriage to Fritz Mandl, an Austrian munitions dealer. Her marriage would become unhappy, causing Lamarr to flee to England where she used connections to get a flight to Hollywood. Once there, her career really took off. Lamarr started being able to pursue her scientific love again. A big impact on her ability to pursue inventing was Howard Hughes, who gave her the support and push to work on her ideas. While working on other ideas Hedy Lamarr would meet George Antheil, a composer with whom she would work together on her most notable invention. During the lead up to World War II her idea was to invent something in communications to help the allied forces. This materialized with the two of them developing frequency-hopping technology for radio waves. Lamarr and Antheil filed for a patent to then sell to the U.S. army. Though the patent was granted, the U.S. army rejected their idea.

Her personality involved two very strong parts, her social prowess and her inventiveness. I was inspired by both these things. The first manifested itself in her very successful film career in Hollywood. Her career, in films alone, totaled around thirty. Secondly her inventive spirit leaked into her inventions that ranged from dissolving tablets to her frequency-hopping technology. This technology was not used for its original purpose, though it would lead to very valuable developments in the future. Though she never saw it, her technology would be the basis for modern wireless technology like Bluetooth. These potentially conflicting sides of her personality are what drew me to her. For someone else they could have clashed, or one may have forced the other to fizzle out. Not for Hedy Lamarr. Though there were times in her life where she wasn't inventing, in the end she was both an exceptional inventor and actress. This is what I'm inspired by: not restricting yourself to being only one thing.

The basis of my whole piece is a peg board. Since there were many elements of her life that intertwined and interacted, this format allowed me to show them all. The biggest

and showiest pieces are a photo from a photoshoot and the torn off cover of a magazine. These elements show her image to the world, what was on display in the public eye. This is why they are what draws your attention first. Scattered around are the smaller elements that surround these two things. Each small element represents a part of her life. The folded plans for her frequency-hopping technology are connected to a news article about technology in the war, which hides a photo of a submarine (one of the original possible applications of her technology). There is a string with six rings for each of her marriages. A pin with a strip of film for her acting career and later patriotic nature. The card with two test tubes on it represents her habit of having portable test tubes to experiment with while on set. Lastly, the dashed line coming from a steamboat represents the move she made from Europe to the United States. When looking at the piece, the viewer should see all the elements that make up her personality rather than just one.

After experiencing and researching the life of Hedy Lamarr, one thought keeps coming back to me: how a person shouldn't feel the need to restrict their lives to the boxes made by society when it comes to our passions and careers. While you might pursue one aspect of yourself, you can keep the other one on the back burner, ready to light up when you find time again. Personally, I have always struggled with working out how my many creative and academic interests would mix once I get to college. Working on this project allowed me to see some hope for my future in multiple fields. I hope that when people view my piece at our community's local library where it is on display, they think about more than just how amazing of a person Hedy Lamarr was; that her legacy can be two-fold. I hope that maybe a child will look at her story and realize that they can be a biologist and musician, or an athlete and an engineer.