Lowell Milken Center for Unsung Heroes
ARTEFFECT

Impact Statement

Maria Mercedes Duverges Garcia, Grade 11
Beyond the Silver Screen, 2026
Watercolor, colored pencils, fine liners, collage, and burnt paper on paper, 15 x 18 inches
Abraham Lincoln School, La Romana, Dominican Republic
Unsung Hero: Hedy Lamarr

An unsung hero is someone whose ideas, actions, or contributions help shape the world even if they are not fully recognized at the time. For my project, I chose Hedy Lamarr because her story reveals how a person can be much more than the image the public sees. While many know her as a glamorous Hollywood icon, I wanted to show that intelligence and scientific curiosity can coexist within an actress who is often deemed to be known only for her beauty. To me, her beauty is beyond her appearance; it lies in her visionary mind. I was drawn to her story because it shows how someone can quietly contribute something meaningful to the future while being hidden in plain sight.

Hedy Lamarr was born in Austria in 1914 and became one of the most famous actresses in the world. Despite her success, she spent her nights at an "inventing table" experimenting with technology. During World War II, she worked with composer George Antheil to develop a "Secret Communication System" to guide torpedoes using radio signals that enemies could not jam. Their invention used "frequency-hopping," allowing signals to rapidly switch among 88 different frequencies—modeled after the keys of a piano.

Lamarr’s impact was overlooked precisely because she was a victim of her own public image. When she presented her invention to the U.S. Navy, they dismissed her, suggestively telling her to "sell kisses" for war bonds instead of patents. Because she was a woman and a movie star, her intellectual legacy was shelved for decades. Today, her concept is a foundational pillar for Wi-Fi, Bluetooth, and GPS. Her story is a reminder that true beauty extends into one’s character and intellect, far beyond the surface-level aesthetic of the silver screen.

My artistic vision focuses on the concept of being "hidden in plain sight." I portrayed Lamarr in a military green uniform that intentionally blends into the cool, deep blue tones of the background. This "camouflaged" effect symbolizes how her brilliance was obscured by her environment and how she went unrecognized despite her fame. Suspended within the composition is a 3D butterfly-like element, which serves as a metaphor for her frequency-hopping technology. Just as a butterfly flits unpredictably to evade capture, her invention allowed radio signals to "hop" between frequencies to evade enemy interception.

The background includes a collage made from burnt paper and newspaper elements. Headlines like "DAILY VARIETY" reference the sensationalism that overshadowed her intellect. In the artwork, a three-dimensional torpedo breaks through this newspaper surface, symbolizing her real contributions, physically shattering the superficial stories and "enemy alien" labels that once

defined her. The torpedo serves as a reminder that behind the headlines was a brilliant strategist capable of world-changing thought.

I also included circuit-inspired fine liner work to represent her influence on modern technology. These circuit forms symbolize the invisible wireless threads that connect us today, tracing them back to her original 1942 concept. Even though modern technology is vastly more advanced, the "DNA" of our digital world can be found in her wartime sketches.

To create this piece, I used a combination of colored pencils, fine liners, collage, and burnt paper. The portrait was drawn with colored pencils to capture a sense of human vulnerability and quiet strength. The burnt paper adds a tactile sense of history, suggesting a story that was nearly lost to time. By combining traditional drawing with mixed media and 3D elements like the torpedo and butterfly, I wanted the artwork to feel as layered and complex as Lamarr herself.

References:

Dean, A. (2017). *Bombshell* [Film].

"EFF: "1997 Pioneer Award.

National WWII Museum: "Hedy Lamarr: Actor-Inventor.

Rhodes, R. (2011). Hedy's Folly.

"Scientific American: "The Mind Behind Wi-Fi.

Shearer, S. (2010). Beautiful: The Life of Hedy Lamarr.

U.S. Patent 2,292,387 (1942).

"Visuals: Daily Variety archives; 1940s torpedo specs; butterfly metaphors in frequency-hopping research.