



Impact Statement

Berra Karac, Grade 12

The Art, 2026

Watercolor, colored pencil on paper, 14 x 18 inches

Özel Antalya Açı Anadolu Ve Fen Lisesi, Antalya, Turkey

Unsung Hero: Hedy Lamarr

Hedy Lamarr is often remembered as one of the most beautiful actresses of Hollywood's Golden Age. However, behind her glamorous image was a brilliant and innovative mind that the world did not fully recognize during her lifetime. While she starred in iconic films and captivated audiences with her elegance, her most important contribution was not on screen—it was in science and technology.

Lamarr was an inventor who co-created a groundbreaking communication system during World War II. At a time when women in science were rarely acknowledged, she quietly worked on ideas that would later shape the modern digital world. Despite her intelligence and creativity, she was long overlooked as a serious contributor to technological advancement, which is why she can truly be considered an “unsung hero.” Lamarr's most significant contribution was the development of a wireless communication technique known as Frequency-hopping spread spectrum, which she created together with George Antheil. This system allowed radio signals to rapidly switch between different frequencies, making them extremely difficult to detect or jam.

Originally, the invention was designed to help guide torpedoes safely during World War II, ensuring that enemy forces could not interfere with communication signals. Although her invention was not fully utilized during the war, it later became the foundation for many modern wireless technologies.

Today, her idea plays a key role in technologies we use every day, such as Wi-Fi, Bluetooth, and GPS. These systems rely on secure and stable communication signals, something Lamarr's invention helped make possible. Her work has had a lasting impact on global communication, influencing how people connect, share information, and navigate the world.

Despite this, recognition for her scientific achievements came much later in her life. This delay highlights how her contributions were underestimated simply because she was seen primarily as a film star rather than a serious inventor. In my artwork, I wanted to reflect the dual identity of Hedy Lamarr by presenting two contrasting sides of her in a single composition. On one side, I illustrated her as the classic Hollywood actress—warm tones, soft lighting, and elegant features represent her public image and the way society perceived her beauty.

On the other side, I used cooler blue tones and abstract elements to symbolize her intellectual and innovative side. This part of the drawing represents her hidden genius and her contributions to science and technology. I aimed to show how these two identities coexist within the same

person. My goal is to raise awareness about her contributions and to inspire others to recognize the hidden potential in people who may be underestimated. The artwork serves as a reminder that intelligence and creativity can exist in unexpected places, and that true impact is not always immediately visible.

By visually combining her two identities, I hope to tell a more complete story of who she was and why she matters. Ultimately, this piece is not just about Hedy Lamarr—it is about breaking stereotypes, valuing knowledge, and appreciating the unseen contributions that shape our world today. I believe the best way to make an impact is through art.