The Brain of the Most Beautiful Girl in the World

by Corey Hoard

"My face has been my misfortune... a mask I cannot remove: I must live with it. I curse it."

- Hedwig Kiesler, qtd. in Shearer 112

Hedwig Kiesler was a woman of dimensionality, of many names and surprising talents. She thrived on fantasy and fame but took solace in independence of mind. From the moment of her arrival in America, she was heralded as "the most beautiful girl in the world." Even today, Kiesler is, for many, a symbol of the Golden Era of cinema. Over her lifetime, she had seven high-profile husbands, and to the public, lived a lavish life of wealth and success. However, from a young age, Kiesler's beauty would reveal itself as both an asset and a curse, as she embraced and battled with it by turns throughout her life. Her face would prove both her prison and her liberator.

Hedwig Eva Maria Kiesler was born on November 9th, 1914 in Vienna, Austria, the only child of a humble Jewish family. Despite their social status, her parents tried to raise Kiesler in relative privilege, exposing her to culture early in life. Her beauty was apparent from a young age, and Kiesler's parents were careful to avoid flattering her to promote modesty. Despite their efforts, she became accustomed to using her appearance to get what she wanted by, as Shearer puts it, "becoming a chameleon, willing to change herself to please others" (283). Hedwig—or "Hedy," as she was affectionately known—was strongly independent from a young age, prompting her parents to impose strict rules that would inevitably be broken.

Kiesler was fascinated with cinema, and she "vowed to everyone that someday [she] would be a star" (qtd. in Shearer 265); it was not long until this vow became a reality. Forging a permission slip, she departed school and snuck onto the set of a local film studio, where she was able to convince the employment manager to hire her as a script clerk at the age of seventeen. It was from this act of defiance and ambition that Kiesler's film career began. Her stunning looks and powerful personality enabled her to play progressively larger roles as she quit school to pursue acting professionally.

Despite her success, it was around this time that Kiesler began to encounter problems that would plague her throughout her life. Her stunning looks made her a target for men; at the age of fourteen, Kiesler was raped by the family's laundryman, an experience she felt affected her profoundly (288). At the same time, she realized that beauty was the key to her success. Kiesler became increasingly consumed with improving her appearance, at one point taking "a thyroid compound [in an effort to lose weight, eventually resulting in] a serious seizure that weakened her heart" (320).

She found mild success in the Viennese film industry; yet, for the ever-ambitious Kiesler, this was not enough. She turned her back on her homeland, and, romance in heart and fame in sight, travelled to Prague in pursuit of grander roles. Kiesler was catapulted into fame when she appeared at the age of eighteen in the Czech film *Ecstasy*, historically revolutionary for being the

first non-pornographic film to depict sexual intercourse and female orgasm. Kiesler was willing to sacrifice her dignity for fame—and it worked. *Ecstasy* was met with critical success, and news of its notoriety spread to America. The film shocked the socially conservative public in America and Europe alike and was censored and banned in several countries, which only further cemented its popularity (Shearer 626, 905). Entranced by her work, the international film industry began to pay serious attention to Kiesler. Despite its importance in her ascent to fame, she was deeply ashamed of her role in *Ecstasy*, later vowing to never appear nude in a film again (1115). Throughout her long career in cinema, she was never truly able to escape her role as "the *Ecstasy* lady." And yet, undeterred by her regret, Kiesler carried on acting. In between films, she appeared in several theatre productions, including the successful *Sissy, the Rose of Bavaria Land*. It was here that she would meet Friedrich Mandl.

For Kiesler, the summer of 1933 was filled with an unending stream of male suitors infatuated with her beauty. There was, however, one man that stood out in particular. After he sent lavish flower displays after every performance, Kiesler agreed to meet with the mysterious Fritz Mandl. She was instantly enchanted by his charisma and determination, and the pair began an intense courtship, ending in marriage only eight weeks later (Shearer 782). Though the nineteen-year-old bride was initially happy with her new life of wealth and status, it was only after she moved into his lavish Swiss castle that she began to realize her new husband's sinister nature. For beneath his high-class exterior, Mandl was a powerful arms dealer who, in violation of the Versailles Treaty, was secretly supplying Hitler with armaments, explosives, and airplanes (Couey 3). He paraded Kiesler around like a trophy, showing her off at military technology conferences. business meetings, and extravagant dinners with high-profile patrons ranging from Sigmund Freud to Benito Mussolini, and, it is rumoured, Hitler himself (Shearer 799 - 812). When she was not on display, Mandl kept his bride imprisoned in her room under strict supervision by a maid and secured by no fewer than seven locks. Kiesler would later write that her days were scheduled down to the very minute to arrest any independence (823). When Hitler himself named Mandl an "Honorary Aryan" (1026), Kiesler was filled with immense disgust. Of Jewish heritage herself, she could no longer stand to be a part of the nightmarish and hypocritical marriage that had consumed her freedom.

Mandl's departure for a hunting trip provided Kiesler with an opportunity for escape, though historical sources differ on the details. In one account, she dressed up as a servant and snuck out with a suitcase (Shearer 1040). Another more adventurous version has Kiesler drugging her maid, stealing her clothes, and fleeing the premises in disguise (Couey 3). In a less popular variation, she simply jumped out of a window and into a pile of snow. Regardless of how it happened, one thing was certain: after four years of imprisonment, Kiesler finally broke free. Using money obtained from years of discretely selling her jewelry, she fled to London. There she met Louis B. Mayer of MGM Pictures, who was travelling Europe in search of Jewish actors to liberate from Hitler's rule. He offered her a meagre contract of \$125 a week—passage to America not included (Shearer 1074). Unsatisfied and thoroughly offended, Kiesler turned down the deal, and Mayer departed for New York.

Hedwig Kiesler was never one to settle for failure. Later that night, she once again donned a disguise and snuck onto the ship, boarding under the guise of the nanny of violin prodigy Grisha Goluboff (Shearer 1084). Mayer could not help but notice the attention Kiesler commanded as

she captivated the passengers with her beauty. He finally conceded, newly enamored, and offered her a seven-year contract worth almost five times his previous proposal. According to Shearer, popular conception holds that his mood was so improved he hired Goluboff as well.

The voyage across the Atlantic and away from Mandl marked a turning point in Kiesler's career. The experience was so transformative that it prompted her to adopt a new name: Lamarr, "for the sea!" (Couey 3). Hedy Lamarr, as the public now knows her, would go on to star in over thirty of the most famous pictures of cinema's Golden Era. In her autobiography, she reckoned to have made thirty million dollars over the course of her film career—no small sum in that time. Despite her film success, the ever-ambitious Hedy was never satisfied with herself. The negative self-image that had threatened her health as a teenager continued to plague Lamarr into adulthood. She became increasingly concerned about the size of her breasts (at Mayer's suggestion of inadequacy) and sought a remedy to this problem. Her solution came in the form of a musician and "amateur endocrinologist" she met at a dinner party.

Enter George Antheil: Experimental musician, writer, dabbling endocrinologist, and champion of the avant-garde, he was known as the "bad boy of music" and is now considered the father of the modern techno genre (Shearer 2082-2126). The pair felt an instant camaraderie, and discussed the possibility of hormone-based breast enhancement into the night; naturally, the conversation turned to torpedoes and concern over the possibility of a Second World War. Both of them felt that, given their fame, they had an obligation to help the United States and discussed possible aid.

Around Antheil, Hedy felt free to show her true talent. During one of their many meetings, she recounted for Antheil a discussion of torpedoes overheard while in Mandl's captivity. Torpedoes posed a serious dilemma in the upcoming war: unguided projectiles were easy to dodge and therefore ineffective, while their radio-controlled counterparts could easily be hijacked and redirected. The pair was inspired by Antheil's affinity for automated player pianos. They realised that, much in the same way that a roll of punched tape can control the notes of a piano, a similar roll could shift the operating frequency of a radio transmitter. In 1941, Antheil and Lamarr (now re-married with the surname Kiesler Markey) were awarded Patent US2292387A, entitled "Secret Communication System."

UNITED STATES PATENT OFFICE

SECRET COMMUNICATION SYSTEM

Hedy Kiesler Markey, Los Angeles, and George Antheil, Manhattan Beach, Calif.

Application June 10, 1941, Serial No. 397,412

6 Claims. (Cl. 250-2)

This invention relates broadly to secret communication systems involving the use of carrier waves of different frequencies, and is especially useful in the remote control of dirigible craft, such as torpedoes.

An object of the invention is to provide a method of secret communication which is relatively simple and reliable in operation, but at the same time is difficult to discover or decipher.

Briefly, our system as adapted for radio control 10 of a remote craft, employs a pair of synchronous records, one at the transmitting station and one at the receiving station, which change the tuning of the transmitting and receiving apparatus from time to time, so that without knowledge of 15 strip in a different longitudinal position; and the records an enemy would be unable to determine at what frequency a controlling impulse would be sent. Furthermore, we contemplate employing records of the type used for many years in player pianos, and which consist of long 20 rolls of paper having perforations variously positioned in a plurality of longitudinal rows along the records. In a conventional player piano rec-

Fig. 2 is a schematic diagram of the apparatus at a receiving station;

Fig. 3 is a schematic diagram illustrating a starting circuit for starting the motors at the transmitting and receiving stations simultane-

Fig. 4 is a plan view of a section of a record strip that may be employed;

Fig. 5 is a detail cross section through a record-responsive switching mechanism employed in the invention;

Fig. 6 is a sectional view at right angles to the view of Fig. 5 and taken substantially in the plane VI-VI of Fig. 5, but showing the record

Fig. 7 is a diagram in plan illustrating how the course of a torpedo may be changed in accordance with the invention.

Referring first to Fig. 7, there is disclosed a mother ship 10 which at the beginning of operations occupies the position 10a and at the end of the operations occupies the position 10b. This mother ship discharges a torpedo II that travels

The truth was, Hedy had not spent her time in captivity idly. Never an inattentive guest to Mandl's business meetings, she listened carefully to the discussions of German military technology, fascinated with the intellectual stimulus they provided. Lamarr's invisible passion for the cerebral had begun before and continued after her stint in captivity. During her film career, most of Lamarr's roles called for her to, in her own words, "stand still and look stupid" (Shearer 2441). In reality, she was everything but—when not on set, Hedy was constantly thinking of new concepts and inventions and, despite lacking much formal education, harboured the secret mind of a scientific and mathematical prodigy (Ragan 5). Her keen intellect and head for technology were concealed by the gloss and glamour of her Hollywood appearance and by the public's expectations. After all, as Shearer explains, "in the 1940s, when an attractive actress appeared on the screen, she was little more than set decoration" (107). For Lamarr, science proved to be a way to vent her frustrations about her cinema career; her inventions were a secret challenge to the vapid roles she was assigned because of her beauty. In her own words, "people seem to think because I have a pretty face I'm stupid...I have to work twice as hard as anyone else to convince people I have something resembling a brain" (qtd. in Shearer 2180).

Despite its utility and relevance, the patent that Lamarr and Antheil developed was never implemented during the war. One can imagine the Navy review board disdainfully mocking, "My God, we shall put a player piano in a torpedo" (Couey 5). Lamarr's patent was eventually implemented, years after expiry, using digital components to encrypt secure communications during the Cuban Missile Crisis (Couey 6). The technology behind the device was declassified in the 1980s and was termed "spread-spectrum frequency hopping." Today, spread-spectrum technology is used in mobile phones, Bluetooth connections, and Wifi networks to simultaneously encrypt transmissions and counteract signal interference. In many ways, Lamarr's work was a catalyst for modern telecommunications, laying the foundations of what would one day become a ubiquitous technology. It was not until 1997, three years before her death, that Lamarr's achievements would finally be honoured (Godwin). When told that the Electronic Frontier Foundation was presenting her with a Pioneer Award, Lamarr—then eighty-three years old—wryly remarked, "It's about time."

Over the years, the world forgot about Hedy, the brilliant inventor—Lamarr, the glamorous actress—Kiesler, the prisoner in her own home—and Hedwig, the little Austrian girl in search of fame. A woman who was once a bright star burning wildly with passion and drive faded out in relative obscurity as newer, more glamorous actresses took her place on the screen. Now out of the limelight, Kiesler tried to live the simple life she had come to yearn for, retiring to Florida to finally be free from the stresses of fame (Shearer 6638). She continued to invent to the end of her days, remarking that while "films have a certain place in a certain time period technology is forever" (qtd. in Shearer 6892). Lamarr was never quite able to adjust to a quiet life; every few years, she would once again surface into the world of celebrities in a minor scandal, suing for an unlawful use of her image or standing trial for shoplifting.

On Wednesday, January 19, 2000, Lamarr was found lying still in her bed, "dressed and made up, the television playing" (Shearer 6826). The independent and talented woman who had defied all expectations, rescued herself from peril, and invented key wireless technology had finally found peace. Hedwig Kiesler's battle with the dark side of beauty was finally over.

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