

Impact Statement

Lauren Muller, Grade 11

***Beaming Beyond The Stars*, 2024.**

Acrylic and colored pencil on paper, 24.5 x 20 inches.

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Unsung Hero: Cecilia Payne-Gaposchkin

Trifles (1916) by Susan Glaspell, was the first piece of literature that I read this year, what had originally compelled me to read the one-act play is attributed to the “ancient” looking nature of the manuscript at my local library, however, what kept me hooked and reading until the very last page were the revelations that came to light in critique of the misogyny implicated over women during this time period. In a story about a murder, the plot follows Mrs. Hale and Mrs. Peters who are constantly being pushed aside and dismissed by their husbands, only for the case to be ironically solved by the “trifling” wives who are able to pick up on the clues that to the naked eye appeared insignificant. Throughout each and every scene there is an underlying prejudiced presumption of women’s tasks in the home or workplace being trivial compared to their supposedly diligent male counterparts, and I couldn’t help but feel as though this sentiment that author Glaspell was trying to express was much more prevalent in women who refused to remain passive towards gender subjugation and stifling societal standards/attitudes of the late 19th and 20th centuries. With Glaspell’s message now entrenched within my own moral values as a women’s rights activist, the second piece of literature that I picked up that morning was my physics textbook. Flipping to the page number written on the white board, the first thing that drew my attention was the fine dark ink, at the very end of the page that gave credit to a female scientist by the name of Cecilia Payne. Despite the flashy pictures and diagrams, with larger size fourteen font descriptions and attributions to male scientists, the simplicity in sizing and color of her name on paper only made Cecilia more intriguing. It was as if her personality, adversities, and accomplishments were all fighting to shine through and reveal how much she had contributed to shaping our world today yet was being forced to confine to a size ten, black font sentence hidden in the corner of the textbook. Brushing my fingers over her name one last time before the class period bell rang, I walked out of the classroom with a new purpose: I was going to tell her story in the best way that I knew how, art...through the use of paints and pencils I was going to bring color to her legacy.

That night I began click-clacking away on my laptop, scouring for every article that Google reported had mentioned the name “Cecilia Payne-Gaposchkin.” Her accomplishments were undeniably extraordinary. With an educational background at Cambridge University and eventually Harvard, she pursued astronomy head on, establishing a connection between the spectral sequence of stars to quantifiable stellar temperatures. However, it wasn’t her scientific breakthroughs that sowed in me feelings

of awe and admiration. It was Payne's resilience in the constant pursuit of knowledge and opportunity that made her shine brighter than any star she ever studied. In taking on my artistic piece, I wanted to display all of her passions; from the tools that she used to the observatory that she worked in I wanted to make her someone more than just someone who analyzed the heat and composition of the stars. Through the use of acrylic paints and colored pencils, not only was I able to showcase who she was as a scientist, but I was also able to bring to light who she was at her core: a catalyst for societal change. Although being a well-credited scientist, Payne knew that her life's mission and purpose didn't end at just her experiments and discoveries. She knew that she would have to help pave the way for the next generation of female scientists who would stand up time and time again even if lied to or overlooked by male peers. Ironically, Payne was unable to receive a doctorate from Harvard University because they did not offer degrees to women at the time. Although she was limited to pursuing a Ph.D. at Radcliffe College for her extensive research in the field of astronomy, she would prove too much of the administration and students at the university the promising potential and capabilities of women. From becoming a pioneer and star gazer with big dreams herself, she would eventually become a Harvard professor, a mentor and inspiration, for all female doctoral students pursuing a degree at a university that had once denied them of this opportunity.

Taking in all this information, as I painted her smiling face onto my paper, I knew that I wanted to make her the very center of my piece. I didn't want to place too much of an emphasis on the observatory or scientific elements, but rather place a spotlight on the face and soul of the women who made me realize why I make art. I make art because I want to give a voice to topics and people that have gone unnoticed. Through art I can minimize the loss of ideas, minorities, cultures, and most importantly human life. Art allows me to implicitly contribute to conversations that need to be spoken more about, it allows for me to be a catalyst for change just as Payne once was.

After completing my piece, Payne and I went on a journey back to where we had first met, the classroom. Only this time I was knowledgeable and proud to know that the equations I used in my calculations were created by a female scientist who pushed the boundaries of society. I shared my newfound understanding and artistic piece with my classmates, showing them the various elements that embodied her legacy. To say the least, at the end of it all I felt as though I had contributed to the great conversation of empowering women of both the past and future, because it is our appreciation and understanding for figures such as Payne that give us hope and courage to chase after our dreams.